

# NOAA - ARS Cooperative Snow Research Project -

Watershed Hydro-Climatology and Data for Water Years **1960-1974**



U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE  
Agricultural Research Service



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## Watershed Hydro-Climatology and Data for Water Years 1960-1974

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## PREFACE

This publication is part of a cooperative research project on the physical processes involved in snow metamorphosis and snowmelt between the Agricultural Research Service, U.S. Department of Agriculture and the National Oceanic and Atmospheric Administration, U.S. Department of Commerce. The data units used in the publication are the units in which the data were originally recorded or compiled. Trade and company names are used in this publication solely to provide specific information. Mention of a trade name does not constitute a guarantee or warranty of the product by the U.S. Department of Agriculture or the Department of Commerce or an endorsement over other products not mentioned.

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NOAA-ARS COOPERATIVE SNOW RESEARCH PROJECT -  
WATERSHED HYDRO-CLIMATOLOGY AND DATA FOR WATER YEARS 1960-1974

|                                |                                     |
|--------------------------------|-------------------------------------|
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ABSTRACT. Data are provided for the 3.25 square mile W-3 watershed which is part of the Sleepers River Research Watershed operated by the Agricultural Research Service near Danville, Vermont. The publication contains streamflow, air temperature, snow course, pan evaporation, and soil-moisture data, as well as point measurements and mean areal estimates of precipitation. Also included are data from the NOAA-ARS Snow Research Station which is located adjacent to the W-3 watershed. Detailed measurements of the snow cover and the hydro-meteorological variables affecting snow cover energy exchange have been made since December 1968 at this station as part of a cooperative project to study the physical processes involved in snow metamorphosis and snowmelt. Tabulations of some of the watershed and snow cover variables are included. The remaining variables are summarized. Most of the actual data are contained on an associated magnetic tape.

In addition to the data, information is provided as to the quality of the data and the hydro-climatology of the watershed. This is a high quality set of data suitable for use in developing and testing physically based hydrologic models. The watershed is hydrologically representative of most of the glaciated upland regions of the Northeastern United States. The mean annual precipitation during the 15-year period is approximately 43 inches with about 25 inches per year of runoff. The maximum water-equivalent of the snow cover is generally about 9 to 12 inches.

## CHAPTER I: INTRODUCTION

### BACKGROUND

The Agricultural Research Service (ARS) selected the Sleepers River watershed near Danville, Vermont, as the site for a comprehensive watershed engineering research project in 1957. This 43 square mile watershed was selected because it is hydrologically representative of most of the glaciated upland regions of the Northeast. Streams that drain these regions supply much of the water required for agriculture, industries, and cities in the Northeast, and also create the potential for serious flooding.

The purpose of the Sleepers River Research Watershed has been to provide a better understanding of the behavior of natural watersheds, and to seek new solutions to the watershed engineering problems of the Northeastern United States. The scope of this research project has covered most aspects of watershed hydrology such as the temporal and spatial variations of precipitation, snow accumulation and snowmelt, rainfall-runoff relationships, ground-water accretion and movement, the hydraulics of steep mountain streams, the effects of land use on runoff, and related subjects. The foundation of the hydrologic data collected at the Sleepers River watershed has been an extensive precipitation measurement network (including as many as 33 gages) and a streamflow measurement network of reinforced concrete weirs. Other data which have been collected at selected locations include: air and soil temperature, wind speed, pan evaporation, relative humidity, net and shortwave radiation, snow depth and water-equivalent, and soil moisture.

Investigations at the Sleepers River Research Watershed have been documented in many publications. Among them are several that describe certain aspects of the hydrologic characteristics of the watershed. These may be of interest to those using data from the Sleepers River watershed. The precipitation climatology is described by Engman and Hershfield (1969). Johnson (1963) discusses certain characteristics of snowmelt runoff hydrographs. The storm runoff-producing mechanisms were measured and analyzed by Dunne and Black (1970a, 1970b). Hendrick and DeAngelis (1976) describe and model snow accumulation, melt, and water input patterns.

In 1966, a cooperative snow hydrology study was initiated between the Sleepers River Research Watershed and the Office of Hydrology of the National Weather Service, NOAA [Johnson and Anderson (1968)]. The purpose of this cooperative project is to better understand the physical processes involved in snow metamorphosis and snowmelt. As a major part of this cooperative study, a snow research station was established within the Sleepers River watershed. Instruments were installed to measure all hydro-meteorological variables that have a significant effect on the metamorphosis and ablation of a snow cover, plus all pertinent snow cover variables. Continuous data collection at the NOAA-ARS Snow Research Station began in December 1968. The station is still in operation at the present time. The data collected at the snow research station have been used to develop and test a detailed point energy and mass balance model of a snow cover [Anderson (1976)]. This point model and the test results obtained with the snow research station data provide a firm foundation for the development of improved areal snow cover models.

The development and verification of physically based hydrologic models requires more and higher quality data than that needed to properly apply such models. Generally available climatologic and hydrologic data are usually adequate for model application. Model input and observed values of model output can be determined with reasonable accuracy from these records. However, these data are seldom adequate for verifying the mathematical representations of individual physical processes that are components of the model. In order to verify the mathematical representations of model components, the uncertainty in the estimates of model input variables and the measured output must be minimal. In addition, measurements of other quantities are needed to verify the model estimates of intermediate state variables.

Data of the quantity and quality ideally needed for model development and verification are usually only collected at research watersheds and selected study sites like the Sleepers River Research Watershed and the NOAA-ARS Snow Research Station. However, these data are seldom made available for general use. The last comprehensive set of data from watersheds where snow is of major importance that was made available was that collected during the Snow Investigations [Snow Hydrology (1956)]. These data were collected primarily at the Central Sierra (CSSL) and Upper Columbia (UCSL) Snow Laboratories in the Western United States. Many snow accumulation and ablation models have been developed and tested with this data set [SSARR model (1972), Anderson and Crawford (1964), Eggleston et al. (1971), Amorocho and Espildora (1966), and Anderson (1968)]. However, this data set only represents certain climatic and physiographic conditions. It is important to test most models under a wide variety of conditions. The amount of snow over the Sleepers River watershed is small in comparison with that which normally accumulates at CSSL and UCSL. However, the Sleepers River has a greater variety in snow cover and meteorological conditions occurring during snowmelt periods. Also, the Sleepers River has significant runoff events during all seasons of the year. Significant runoff is primarily restricted to the spring melt season at CSSL and UCSL. Thus, the Sleepers River watershed data are not limited to the testing of snow cover models.

#### PURPOSE OF THIS PUBLICATION

The basic purpose of this publication is to provide a high quality set of watershed data suitable for use in developing and testing physically based hydrologic models. This includes detailed point data from the NOAA-ARS Snow Research Station and areal data from an adjacent ARS watershed. These data cover the period from October 1959 through September 1974. In addition to providing the watershed data, this publication contains a great deal of information about the data and the watershed. Such information is absolutely necessary in order for the data to be of use in model development and testing.

The publication contains the information about the watershed and the quality of the data. The publication also includes tabulations of some of the variables and summaries of the remainder. Most of the actual data, because of its volume, are contained on an associated magnetic tape. Information on the contents and acquisition of the magnetic tape are in chapter V.



## CHAPTER II: GENERAL DESCRIPTION OF THE WATERSHED

### INTRODUCTION

The eastern highlands, consisting of hilly plateaus lying west of the New Hampshire White Mountains and east of the Vermont Green Mountains, is an important source of water to the Connecticut River Basin. This region of Vermont constitutes the largest physiographic division of the State, and connects with similar terrain in New Hampshire, Maine, and southern Quebec.

Although this region is among the oldest settled areas of the Nation, little was known of its hydrologic characteristics and water resources. In 1957, in an attempt to aid in characterizing the hydro-meteorological regime of this area, the Sleepers River Research Watershed was established.

This watershed, 43 square miles in area, is located in Caledonia County, Vermont. The mouth of the watershed lies one mile north of St. Johnsbury, Vermont. The Sleepers River and its parent catchment basin, the Passumpsic, are considered quite typical of the land use, cover, soil, and topographic conditions found in the eastern Vermont highlands and in fact of the entire glaciated upland region of the Northeastern United States.

The data enclosed in this publication were recorded on watershed 3 (or W-3), a 3.25 square mile subwatershed located in the west central portion of the overall Sleepers River basin. Fig. 2.1 is a topographic map of the W-3 watershed showing the watershed boundaries and the hydro-meteorological data stations. Fig. 2.2 is an aerial mosaic of the W-3 watershed. The aerial photographs used to construct this mosaic were taken on March 16, 1975. There was 100 percent snow cover on this date which helped to clearly delineate open, coniferous, and deciduous areas.

### HISTORIC LAND USE OF THE REGION

The 5.8 million acres comprising the State of Vermont have changed from 100 percent forested when early settlers first appeared, to less than 25 percent forested, and then gradually back to about 70 percent forested at the present time. During early settlement, the forest was cleared for general farming purposes, later for farm and municipal timber, and then still later for commercial lumber and pulpwood.

The earliest farming involved the production of subsistence crops, as well as such livestock as cattle, sheep, and hogs. At the beginning of the 1800's, Vermont grew extensive crops of corn, wheat, oats, rye, barley, peas, beans, and grasses such as timothy, white clover, and red clover. By producing the above, along with flax, hemp, and wool, the State was more or less self-supporting. Maple syrup was produced as a staple for both home use and outside sale, along with milk, butter, and cheese. Another staple, potatoes, was grown for home consumption and also as an important cash crop in the early 1800's.





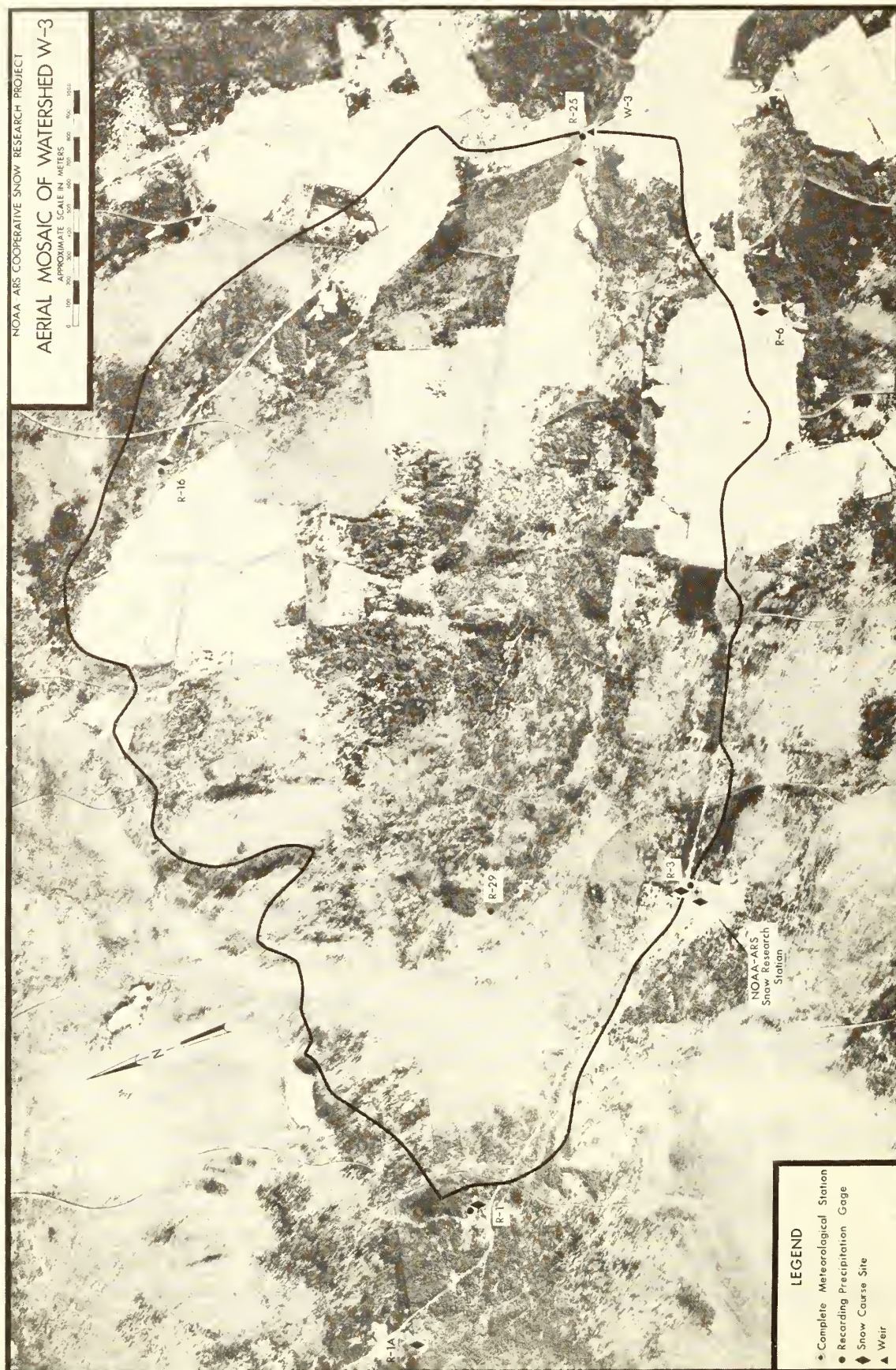


Figure 2.2. Aerial mosaic of the W-3 watershed (taken on March 16, 1975).



During the period when much of Vermont was cleared for agriculture, wool, lambs and sheep, cattle, pork, and dairy products were exported to other states. Cattle were herded and driven to east coast markets, some as far away as southeastern Pennsylvania.

However, the expansion of national rail systems throughout the Midwest and east brought these productive areas into direct competition with Vermont; this almost singlehandedly spelled trouble for Vermont as an exporter of agricultural produce. The use of open land in Vermont for raising cattle, hogs, and sheep declined, and by 1880 Vermont farmers were specializing in dairy farming and selling butter to outside western markets.

In 1880 about 84 percent of the State was classed as open farmland; of this about 67 percent was considered as open cropland and pasture capable of being plowed. By 1930, sixty-seven percent of Vermont was classed as farmland with 36 percent of this in crops and pasture.

In the 1970's, Vermont is about 32 percent agricultural land and 68 percent forest. While the relative percentages of cover vary for different regions of the State, the 32-68 percent breakdown is representative of the cover patterns for the eastern highlands encompassing the Sleepers River Research Watershed. Much of the decline from 67 percent farmland to 32 percent farmland was caused by the abandonment of marginal and poorly accessed areas that soon reverted to brushland and forest. These less desirable, inaccessible farmland areas simply could not compete with imports from the richer eastern and western farming areas. The cover distribution breakdown for the W-3 watershed is also about one-third open or agricultural and two-thirds forest.

The patterns of present day farming set by the loss of outside markets, primarily a decline in tillage farming and meat production, has carried through into the present decade. While less cattle are raised for beef, dairy farming remains as an important agricultural pursuit. Grain corn agriculture has declined in favor of tillage corn production. Oats and potato production have declined to minor importance. Grassland farming for hay and pasture, however, are important enterprises and have one hydrologic advantage, viz., the effects of the predominantly grassland agriculture probably account for the minimal soil erosion found in the Sleepers River Research Watershed.

The land use and cover patterns and practices have not changed markedly over the past two decades. Thus, the physiographic features of the W-3 watershed can be accurately assumed to have remained the same throughout the period covered by this publication.

## CLIMATE

The common concept of Vermont is that of cold, snowy winters and colorful, sunny, but crisp autumns. Spring and summer seasons are seldom considered when one thinks of Vermont in the rustic or romantic vein. However, a truer picture of Vermont perhaps would be one of large temperature extremes, rapid changes of weather patterns, diverse weather from south to north and east to

west, but with a relatively even distribution of monthly precipitation.

The State is located such that air masses from the far northern Canadian regions and southern Gulf regions can both affect the State's climate. Such a meeting ground of diverse air masses is afflicted with an inconstant type of climate. Cold dry air from the north, coupled with warm, moist air from the south and triggered by low pressure passages, creates frequent short periods of fair-to-cloudy-to-stormy and then back to fair weather. The nearby Atlantic Ocean has only a slight influence on Vermont's general climate.

The Vermont highlands encompassing the Sleepers River Research Watershed are characterized by long, cold winters, and pleasant, but moist summers. January temperatures average about 17°F. About 40 to 60 days in the winter have minimum temperatures of 0°F or lower. Temperature variability over the 43 square mile Sleepers River watershed, where elevations range from 660 to 2600 feet above sea level, shows that minimum temperatures may vary by as much as 12°F. Summer temperatures are quite pleasant with the mean temperature in the hottest month, July, being about 68°F. The elevation and climate in this part of the State are such that relative humidity in the summer months is seldom unpleasant.

The mean annual temperature for station R-3, located at an elevation of 1810 feet within the W-3 watershed, is about 39°F. The length of the growing season also varies with elevation. The frost-free period on the watershed varies from about 95 days at the highest elevations to 130 days at the lower elevations. The mean annual precipitation for the W-3 watershed is about 43 inches. The maximum water-equivalent of the snow cover is normally about 9 to 12 inches. Total snowfall averages about 100 inches. In this area of Vermont, constant snow cover usually persists throughout the December-March period with snowmelt generally occurring in late March and April.

Although extreme variations in total precipitation between months may occur in any one year, long term records show a fairly uniform distribution of precipitation throughout the year. However, in any single year, it is not at all uncommon for a wet June to be followed by a relatively dry July. This sequence may be followed by an August in which the side effects of one or two coastal storms create high monthly totals.

Flooding in Vermont is generally restricted to local areas where high rainfall intensities from thunderstorms can cause severe problems. Rapid snowmelt, coupled with sudden release of water backed up in valley ice jams also can create instant highwater problems. However, statewide flooding is infrequent and uncommon. The extremely varied climate, coupled with aspect, cover, and elevation differences, spaces out the snowmelt. This practically eliminates a synchronized release of water from all areas during any short snowmelt period. The result is that Vermont seldom suffers from snowmelt floods over large areas.

#### TOPOGRAPHY

The W-3 watershed is located in the west central portion of the Sleepers River drainage. It is drained by two branches of Pope Brook, a major

tributary of the Sleepers River. The main channels drain in a southeastern direction. The total area of the watershed is 3.25 square miles.

The outlet of the W-3 watershed is at an elevation of 1135 feet above sea level. The highest point of the watershed is at about 2280 feet above sea level, with a mean elevation of 1610 feet above sea level. Fig. 2.3 shows the area-elevation curve for the watershed. The straight line distance from lowest to highest point is about 2.75 miles.

The average slope of the watershed is about 8 percent. This, however, is not indicative of the general ruggedness of the upper one-third of the headwater area, over which slopes range from 25 to 30 percent.

Most of the watershed has predominant southwest, southeast, and northeast aspects. This, along with the range in elevation, helps create differences in precipitation depth and duration. This is exemplified by striking differences in snow cover depth during the winter and spring melt period throughout the watershed.

Except in orientation, the W-3 watershed is topographically quite similar to most other comparably sized headwater drainages in the Passumpsic River Basin.

#### GEOLOGY

The W-3 watershed is underlaid, for the most part, by the Waits River formation. This is described as consisting of calcareous granulites and calcareous schists (composed of quartz, calcite, muscovite, and biotite), quartz mica schist, and minor micaceous quartzite. The upper portions of the watershed, generally above 2000 feet elevation, contain the Gile Mountain formation. This consists of quartz mica schist, micaceous quartzite, and phyllite (in the garnet and staurolite metamorphic zones).

Superficially, the W-3 watershed for the most part, consists of till with a clay-silt matrix. The watershed is composed primarily of small patches of poorly-sorted, horizontally-stratified (lenticular-bedded) and crossbedded sand, pebbly sand, and pebble gravel.

Seismic studies of depth to bedrock showed great variation in soil depth to impervious bedrock. In much of the watershed, bedrock was found at relatively shallow depths, with some surface outcropping. In only a few scattered places, thicknesses of unconsolidated material 30 feet and deeper were found.

#### SOILS

The "flashy" nature or response of the various drainages in the Vermont highlands reflects the sloping nature of the land and the existence of surface runoff producing source areas that vary in size with soil moisture conditions and rainfall intensities. The complete vegetative growth, both grass and forest in this region, is more attributable to the frequency of rainfall during the growing season than to the moisture storage properties and fertility of the soils.



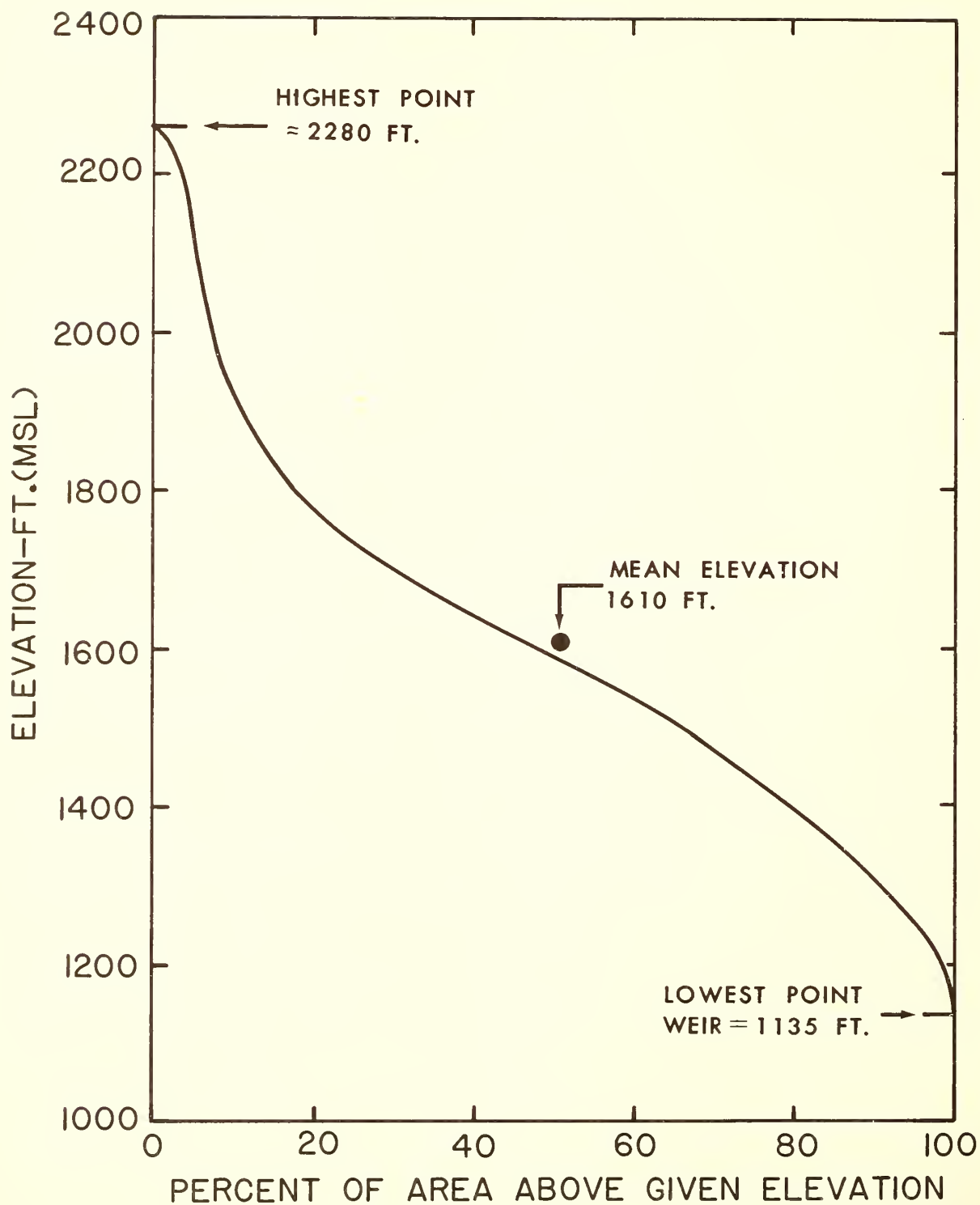


Figure 2.3. Area-elevation curve for the W-3 watershed.

Soils on the W-3 watershed range from coarse-textured sandy loams and loamy sands at higher elevations to fine-textured silt loams on benches, lower slopes, and along narrow bands adjacent to stream channels. Generally, these soils are glacial tills and lacustrine silts derived from schists interbedded with limestone. Variability in depth is found over small areas. It is not uncommon to find soil depths ranging from zero to several inches over exposed rock outcrops to four to six feet between outcroppings.

The three major soil associations and descriptions (as interpreted by the Soil Conservation Service) for the W-3 watershed are as follows:

1. Woodstock-Colrain Association. Characteristically, shallow to bedrock and deep, sloping to steep, somewhat excessively drained and well-drained, stony, loamy - predominantly found in hills and mountains.
2. Paxton-Woodbridge Association. Characteristically, deep, gently sloping to moderately steep, moderately well-drained to well-drained, loamy, stony - predominantly found on hills. These soils may be quite compact within depths of three feet.
3. Cabot-Woodbridge Association. Characteristically, level to sloping, poorly-drained to moderately well-drained, loamy - found both on hillsides and in level depressions. These soils are often found with hardpans at less than three foot depths.

As a rule, infiltration and permeability characteristics of the soils at intermediate and higher elevations are usually high enough that surface runoff is seldom encountered. Runoff surfaces presented by soil freezing are usually absent, for the heavy snow cover provides adequate insulation against surface freezing. However, the finer textured surface soils at lower elevations usually are less permeable and absorbent, and these areas provide runoff surfaces for seepage flow, high intensity thunderstorm runoff, and runoff during peak snowmelt periods. Cabot silt loams are a good example of this.

#### COVER

The vegetation cover for the W-3 watershed has remained relatively stable throughout the entire period of record, and indications are that most of the cover patterns existed at least several decades before the Sleepers River Research Watershed was established.

About one-third of the W-3 watershed area is open in grassland, cultivation, roads, and farm buildings. The remaining two-thirds of the area is in some form of forest cover - generally second and third growth deciduous and coniferous species. Principal deciduous components of the forested areas are the northern hardwoods - birch (yellow - Betula allegheniensis, white - B. papyrifera, and gray - B. populifolia), beech (Fagus americana), and maple (sugar - Acer saccharum and red - A. rubrum). Minor hardwood species also found are white ash - Fraxinus americana, basswood - Tilia americana, striped maple - Acer pensylvanicum, and aspen - Populus tremuloides.

The principal coniferous components of the forested area are of the northern spruce-fir type, consisting of red spruce - Picea rubra and balsam fir - Abies balsamea, with scattered individual species such as eastern white pine - Pinus strobus, white spruce - Picea glauca, black spruce - Picea mariana, tamarack - Larix americana, northern white cedar - Thuja occidentalis and hemlock - Tsuga canadensis. Roughly 40 percent of the watershed forest cover is coniferous and about 60 percent deciduous.

Most of the open agricultural land is in "permanent" grass cover for pasture, hay, or unused pasture. Less than one percent of the agricultural land is cultivated for row or intertilled crops. As a rule, the extensive forest and grassland cover enhances the surface infiltration characteristics of the watershed soils. Consequently, surface runoff is uncommon and soil erosion is not much of a problem.

#### CHANNEL SYSTEM AND STREAMFLOW PATTERNS

Pope Brook and the north fork of Pope Brook form the two major channels draining the W-3 watershed. Both streams are located in narrow valleys with little or no valley storage or "flood plain" areas. Because of the topography and geology of the area, the channels do not store water for appreciable periods. The storage periods are a function of times-of-travel, and high water or flood waves build and progress from source to outlets.

The two major channels are fed by mountain-type streams in the headwater sources. Channel gradients are quite variable, but usually average from 2 to 6 percent slopes. Because of the rocky disorganized masses of boulders and bedrock outcropping in the channel's reaches, channel roughness is usually of a high order. Many of the small feeder streams retain some flow throughout the year. This "perennial" or at least, long-term intermittent nature of flow, is more attributable to frequent storm input than to favorable water storage characteristics of the soils.

The generally steep channel gradients and the narrow channels combine to give these streams their "flashy" character. While there are numerous peaks throughout the year, seldom do individual peaks attain flood magnitude. A peak flow exceeding 100 cfs occurred only once (June 30, 1973) during the period of record.

Peak flows characteristically have short durations, except when low intensity, long duration frontal rainfall occurs or during major snowmelt periods.

Nonstorm period flow sources are not readily identifiable, especially as true ground water. It is more likely that baseflow tends to be of a transient, subsurface seepage, wet-weather seepage, or perched ground-water table source. These temporary sources are recharged and maintained by the frequent summer storms.

## CHAPTER III: WATERSHED W-3 DATA

### Introduction

This chapter describes the data that are included in this publication for the W-3 watershed. The first section describes the data collection sites. Subsequent sections contain information on the quality of both the raw data and the computed values, the data tabulations and summaries included in the appendices, and the data contained on the magnetic tape. Six types of data from the W-3 watershed are included in this publication: precipitation, air temperature, streamflow, snow course, pan evaporation, and soil-moisture data.

#### III.1 DESCRIPTION OF DATA COLLECTION SITES

The data in this publication were collected at 12 sites maintained by the ARS within or near the W-3 watershed, plus the NOAA-ARS snow research station (see Fig. 2.1). The NOAA-ARS snow research station and the data collected at that site are described in Chapter IV. Table 3.1 contains the basic information on each of the 12 ARS stations.

Figs. 3.1 through 3.21 are diagrams and photographs of most of the ARS station locations. Station R-6A is not included because it was only in existence for a short period. Stations R-4 and R-7 are not included because the precipitation data from these sites were only used to time distribute daily amounts from other gages. No weight was given to R-4 or R-7 in the computation of mean areal precipitation for the W-3 watershed. The diagrams attempt to document the layout of each site throughout its period of existence. Most of the photographs were taken between October 1976 and April 1977. However, since some of the sites had been discontinued or altered prior to 1976, photographs taken in previous years were used when available.

#### III.2 PRECIPITATION DATA

This section describes the precipitation data for the W-3 watershed that are included in this publication. This includes information on the data from the individual stations, consistency checks made on the data, and the computation of mean areal precipitation for the watershed.

##### Precipitation Stations

All of the precipitation measurements were made with universal type recording precipitation gages. Alter type wind shields are installed at some of the gage locations (see Table 3.1). Most of the gages are located at reasonably well protected locations. The exceptions are stations R-6 and R-12. Both of these sites have minimal protection from the wind. In addition to the ARS stations, precipitation data from the NOAA-ARS snow research station are included. The precipitation gage at the snow research station is located about 150 feet southwest of ARS station R-3. Because of the proximity of these gages, the data from the two gages were combined into one record. The measurements from R-3 are used from January 1961 through November 16, 1967. The remainder of the record (through September 1974) is from the



Table 3.1. Basic information on ARS data collection sites used in this publication

| Station<br>Identification | Station<br>Name | Elevation<br>Feet | Date Station<br>Opened                     | Date<br>Closed | Data included in publication and<br>period of record                                                                                                                         |
|---------------------------|-----------------|-------------------|--------------------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| R-1                       | Milne           | 2200              | 9/10/58                                    | 11/25/75       | Precipitation; 10/59 to 9/74<br>Universal gage - shielded all winters and<br>during summers only in later years.<br>Snow Course; 1/60 to 4/69<br>Soil-moisture; 1963 to 1969 |
| R-1A                      | Milne           | 2074              | 12/69 (snow<br>course only)<br>11/25/75    |                | Snow Course; 11/69 to 4/74                                                                                                                                                   |
| R-3                       | Townline        | 1810              | 1/60 (snow<br>course only)<br>11/24/60     |                | Precipitation; 1/61 to 11/67<br>unshielded universal gage<br>Air temperature (thermograph); 11/60 to 12/69<br>Snow Course; 1/60 to 4/74<br>Soil-moisture; 1963 to 1969       |
| R-4                       | Smith           | 1810              | 12/9/60                                    | 10/29/75       | Precipitation; 1/64 to 9/74<br>unshielded universal gage                                                                                                                     |
| R-6                       | Pond            | 1350              | 1/60<br>(snow<br>course<br>only)<br>1/6/61 | 7/26/73        | Precipitation; 1/62 to 7/73<br>unshielded universal gage, shield added<br>8/72<br>Snow Course; 1/60 to 5/69<br>Soil-moisture; 1963 to 1967                                   |
| R-6A                      | Barneys         | 1548              | 7/26/73                                    | 11/11/75       | Precipitation; 7/73 to 9/74<br>shielded universal gage                                                                                                                       |
| R-7                       | Niles           | 1380              | 9/10/58                                    | 10/29/75       | Precipitation; 10/59 to 12/63<br>unshielded universal gage                                                                                                                   |

Table 3.1. (Cont'd)

| Station<br>Identification | Station<br>Name | Elevation<br>Feet | Date Station<br>Opened | Date<br>Closed | Data included in publication and<br>period of record                                                                                                                     |
|---------------------------|-----------------|-------------------|------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| R-12                      | McReynolds      | 1150              | 9/3/58                 |                | Precipitation; 10/59 to 9/74<br>shielded universal gage                                                                                                                  |
| National Climatic Center  |                 |                   |                        |                |                                                                                                                                                                          |
| 43-5632                   | North Danville  |                   |                        |                | Air Temperature (thermograph); 10/59 to 12/60<br>Class A pan evaporation; 5/63 to 9/74                                                                                   |
| R-16                      | Wilson          | 1580              | 9/12/58                |                | Precipitation; 10/59 to 9/74<br>unshielded universal gage, shield<br>added 7/72<br>Snow course; 11/71 to 4/74                                                            |
| R-25                      | Clifford        | 1140              | 12/27/66               |                | Precipitation; 1/67 to 9/74<br>unshielded universal gage, shield<br>added 11/71<br>Snow Course; 1/67 to 4/74<br>Snow course site is 400 feet NW of<br>precipitation gage |
| R-29                      | Milne, Jr.      | 1720              | 6/10/64                |                | Precipitation; 6/64 to 9/74<br>unshielded universal gage                                                                                                                 |
| W-3                       | Pope<br>Brook   | 1135              | 12/9/59                |                | Streamflow; 1/60 to 9/74                                                                                                                                                 |

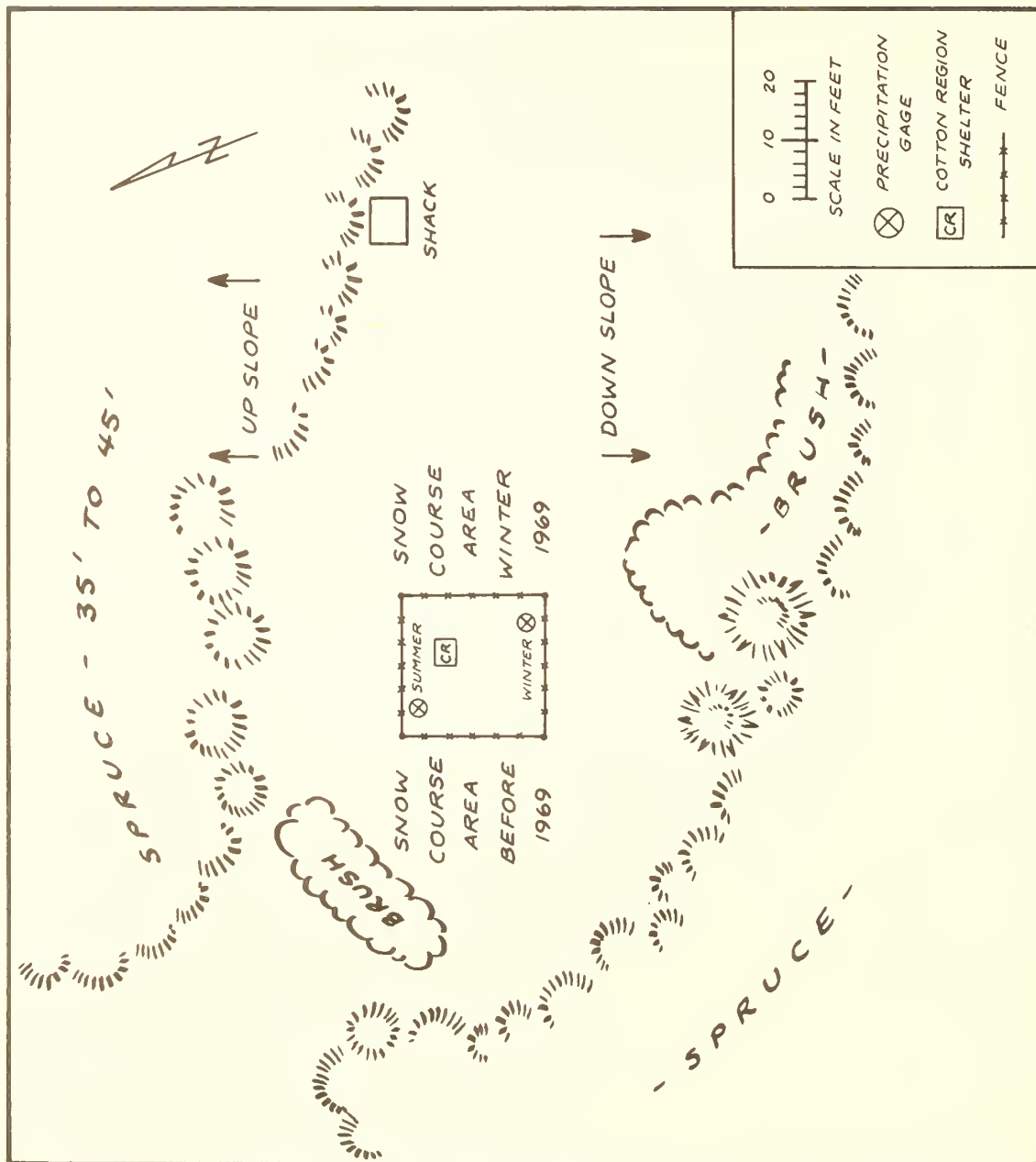


Figure 3.1. Site diagram of station R-1 (elevation is 2200 ft).



Figure 3.2. Station R-1 looking southeast (photograph taken in 1965).



Figure 3.3. Station R-1A looking west.



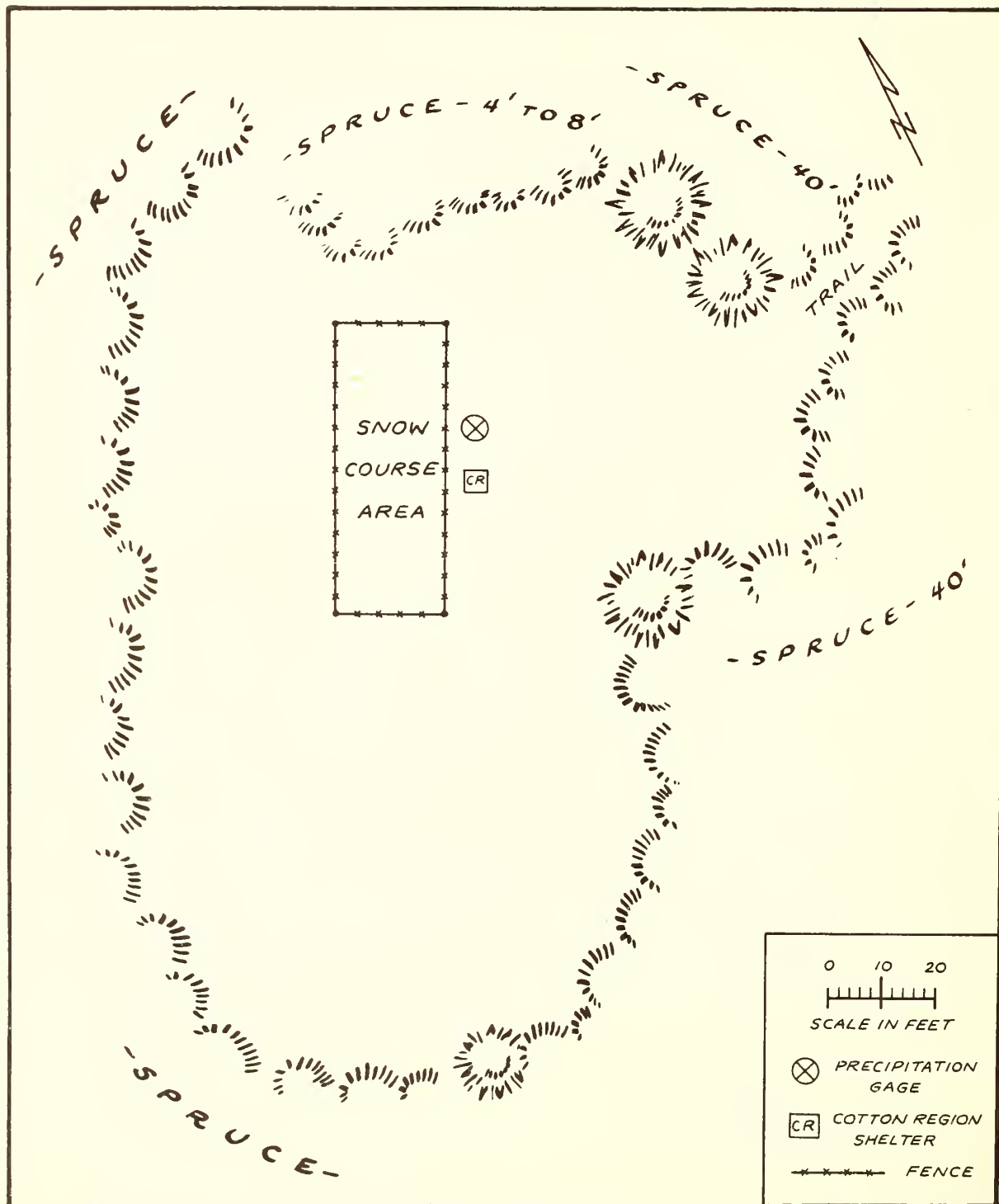


Figure 3.4. Site diagram of station R-1A (elevation is 2074 ft).

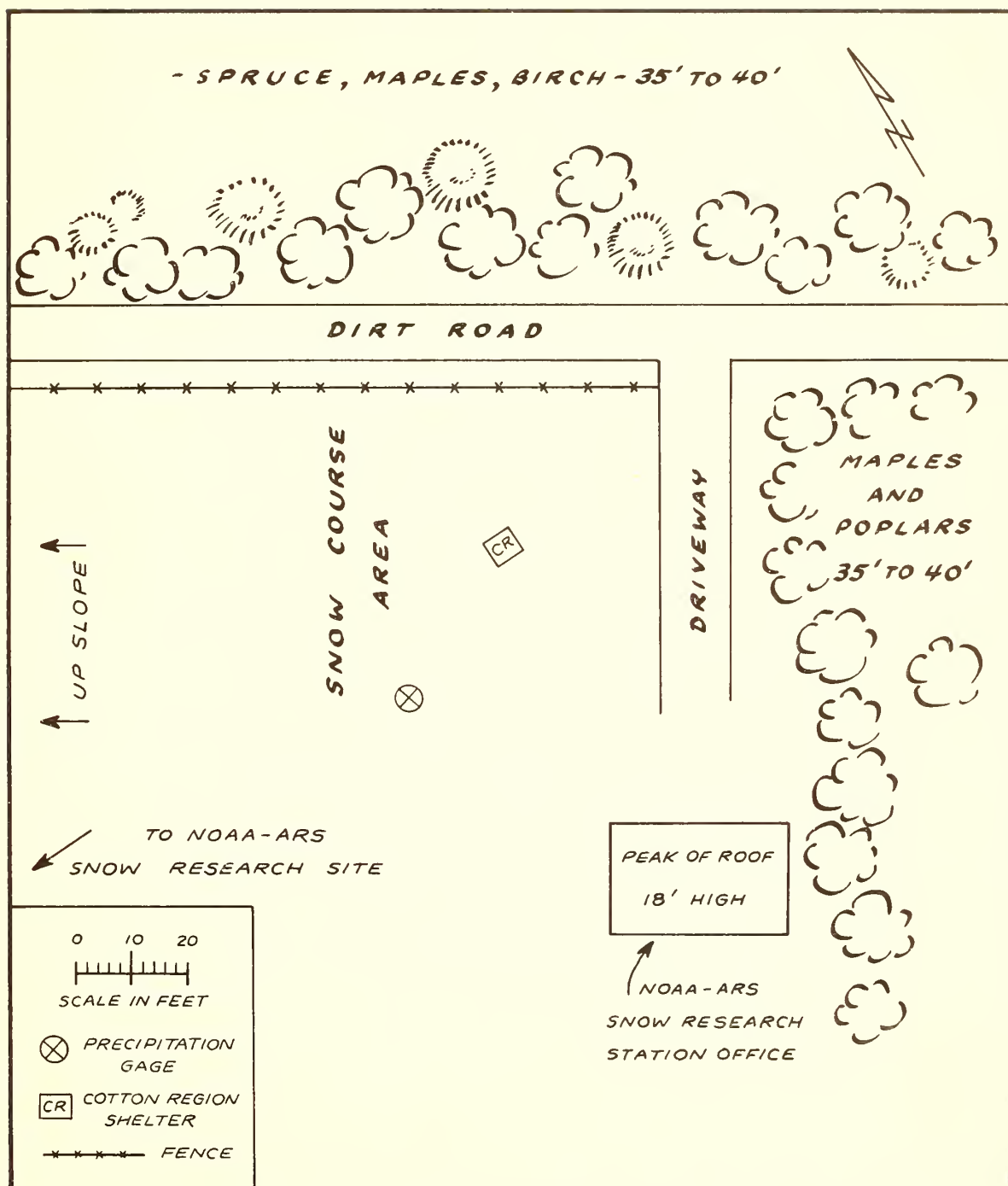


Figure 3.5. Site diagram of station R-3 (elevation is 1810 ft).



Figure 3.6. Station R-3 looking east (photograph taken in 1965).



Figure 3.7. Current photograph of Station R-3 (Building is the headquarters of the NOAA-ARS Snow Research Station).

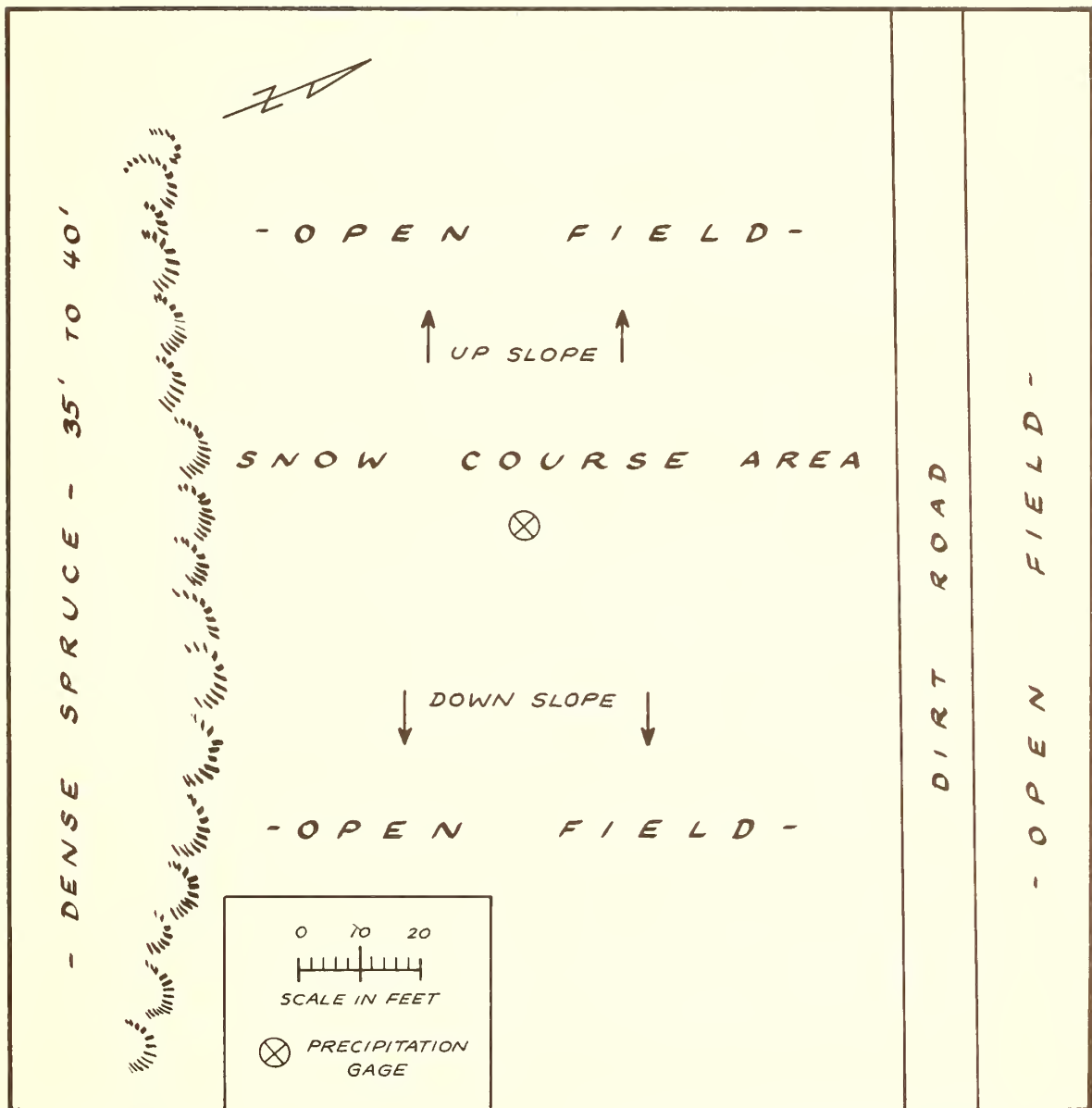


Figure 3.8. Site diagram of station R-6 (elevation is 1350 ft).





Figure 3.9. Location of Station R-6 looking southeast (the circle marks the former location of the precipitation gage).

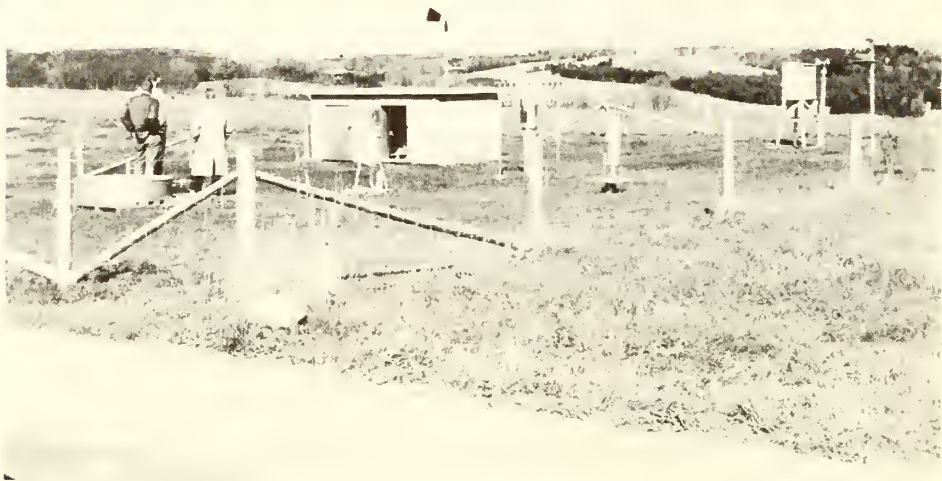


Figure 3.10. Station R-12 from the southeast (photograph taken in 1964).

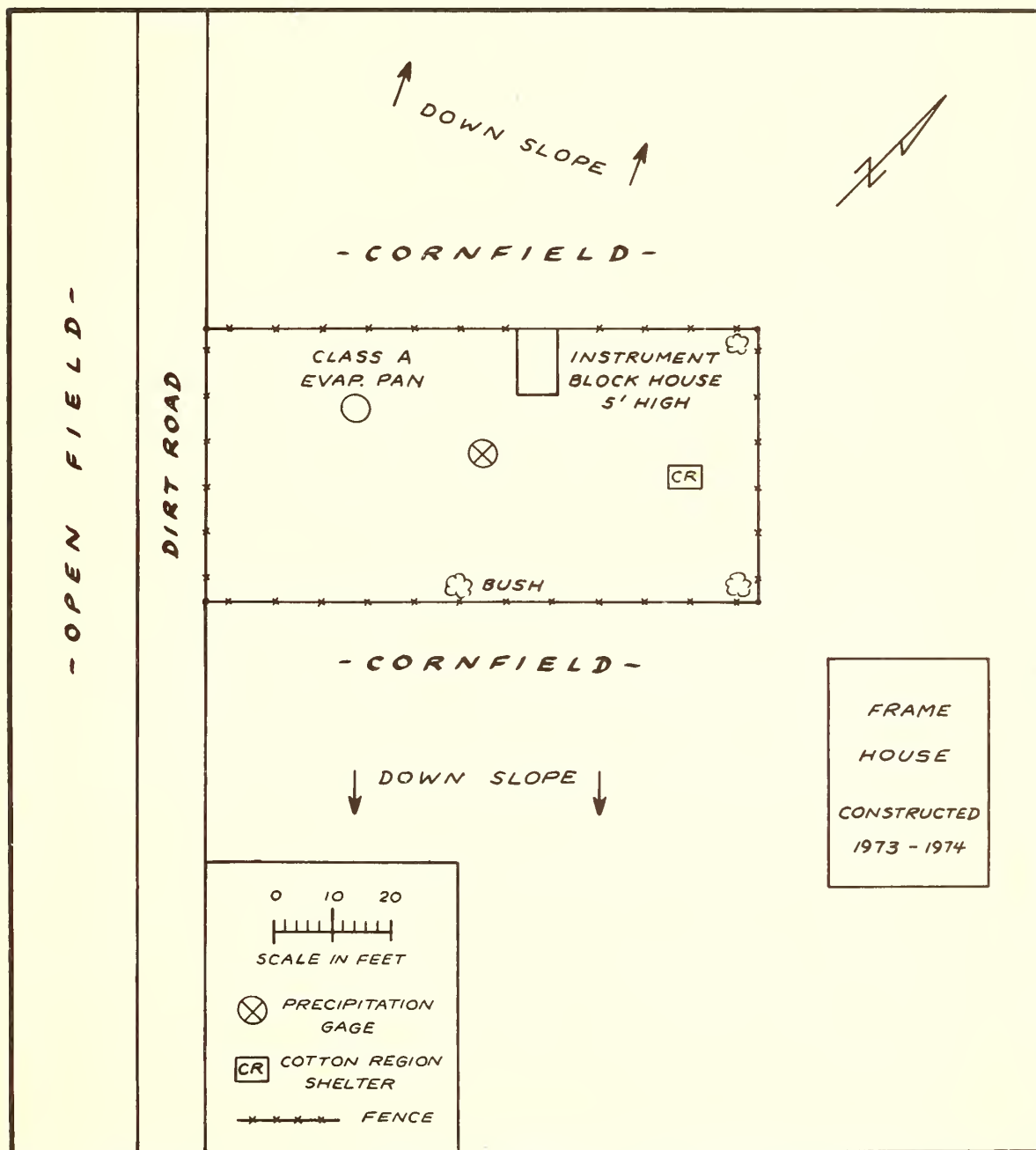


Figure 3.11. Site diagram of station R-12 (elevation is 1150 ft).

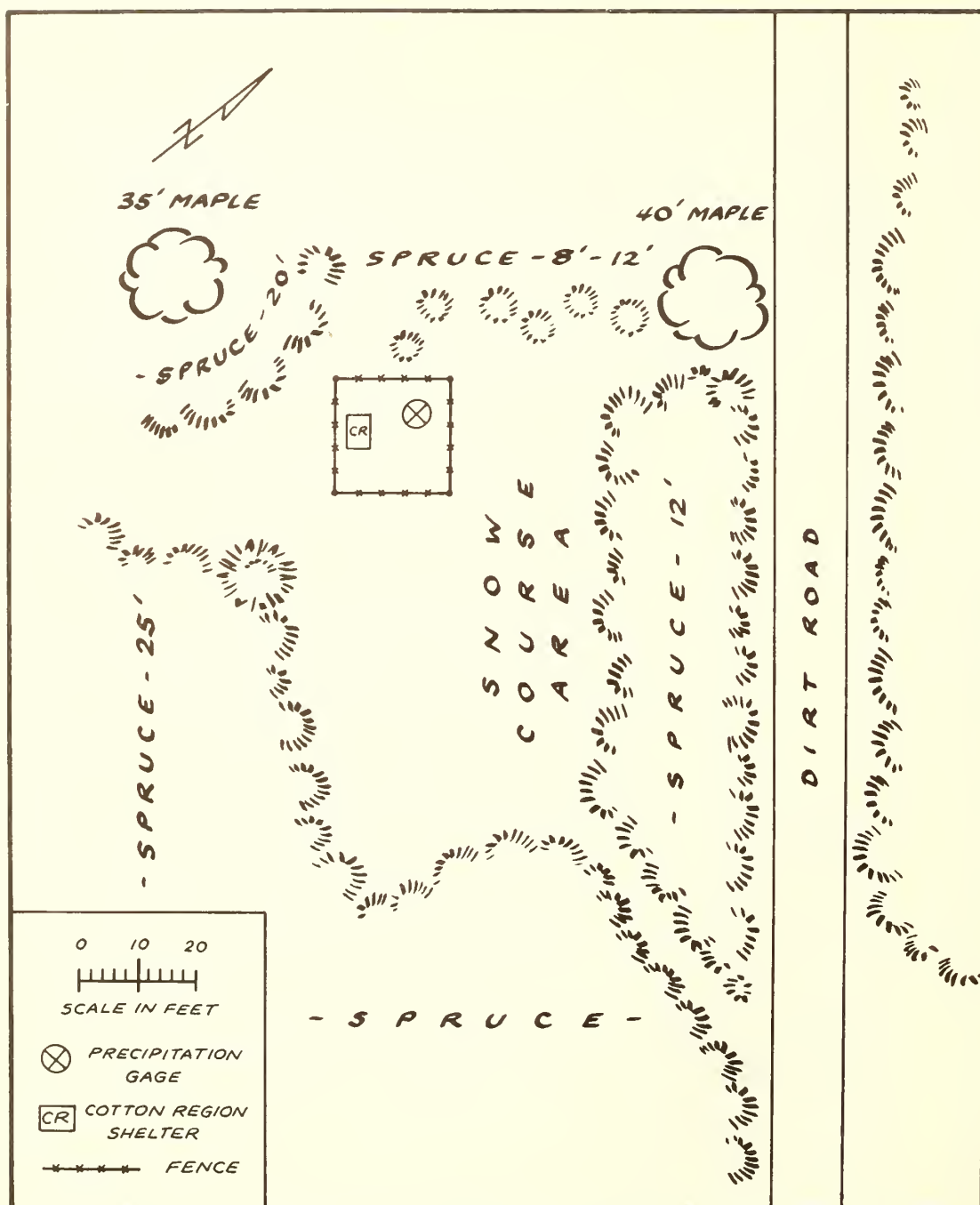


Figure 3.12. Site diagram of station R-16 (elevation is 1580 ft).



Figure 3.13. Station R-16 looking west (snow course is in the center of the photograph).



Figure 3.14. Station R-29 precipitation gage.



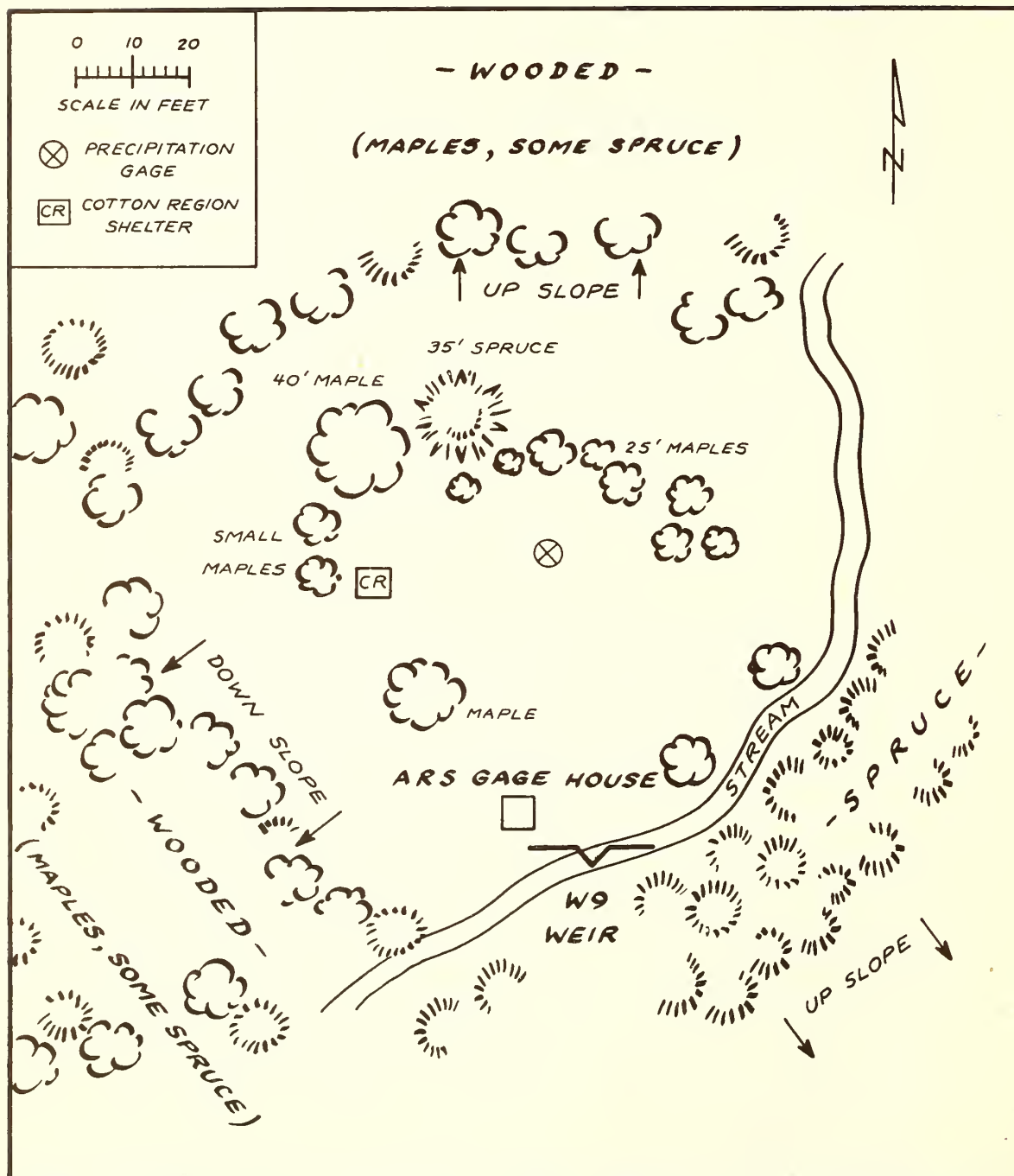


Figure 3.15. Site diagram of station R-29 (elevation is 1720 ft).

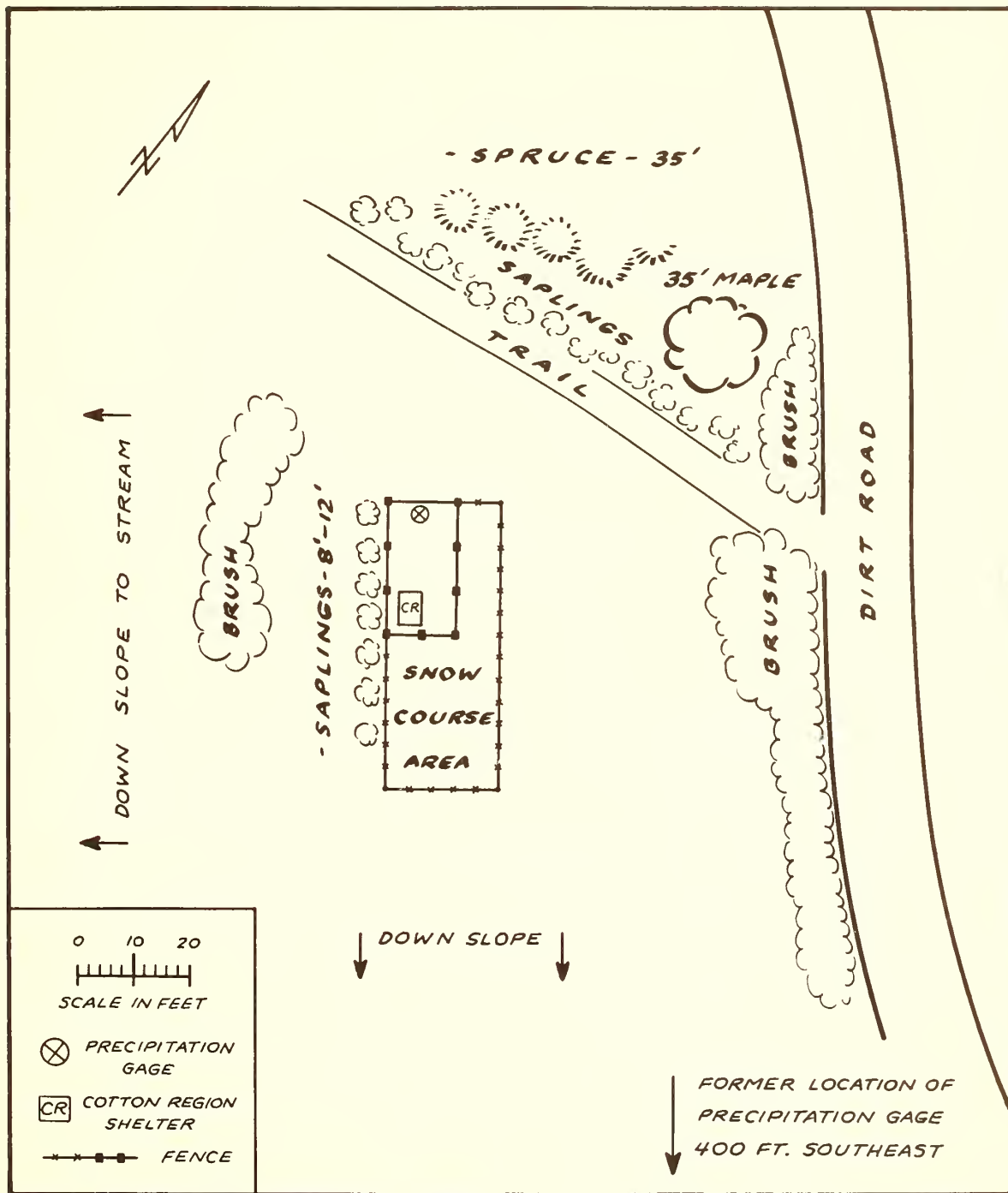


Figure 3.16. Site diagram of station R-25 snow course area (elevation is 1140 ft).



Figure 3.17. Station R-25 snow course site from the east (precipitation gage was moved to this site in 1975).



Figure 3.18. W-3 weir and R-25 precipitation gage (photograph taken in 1965).

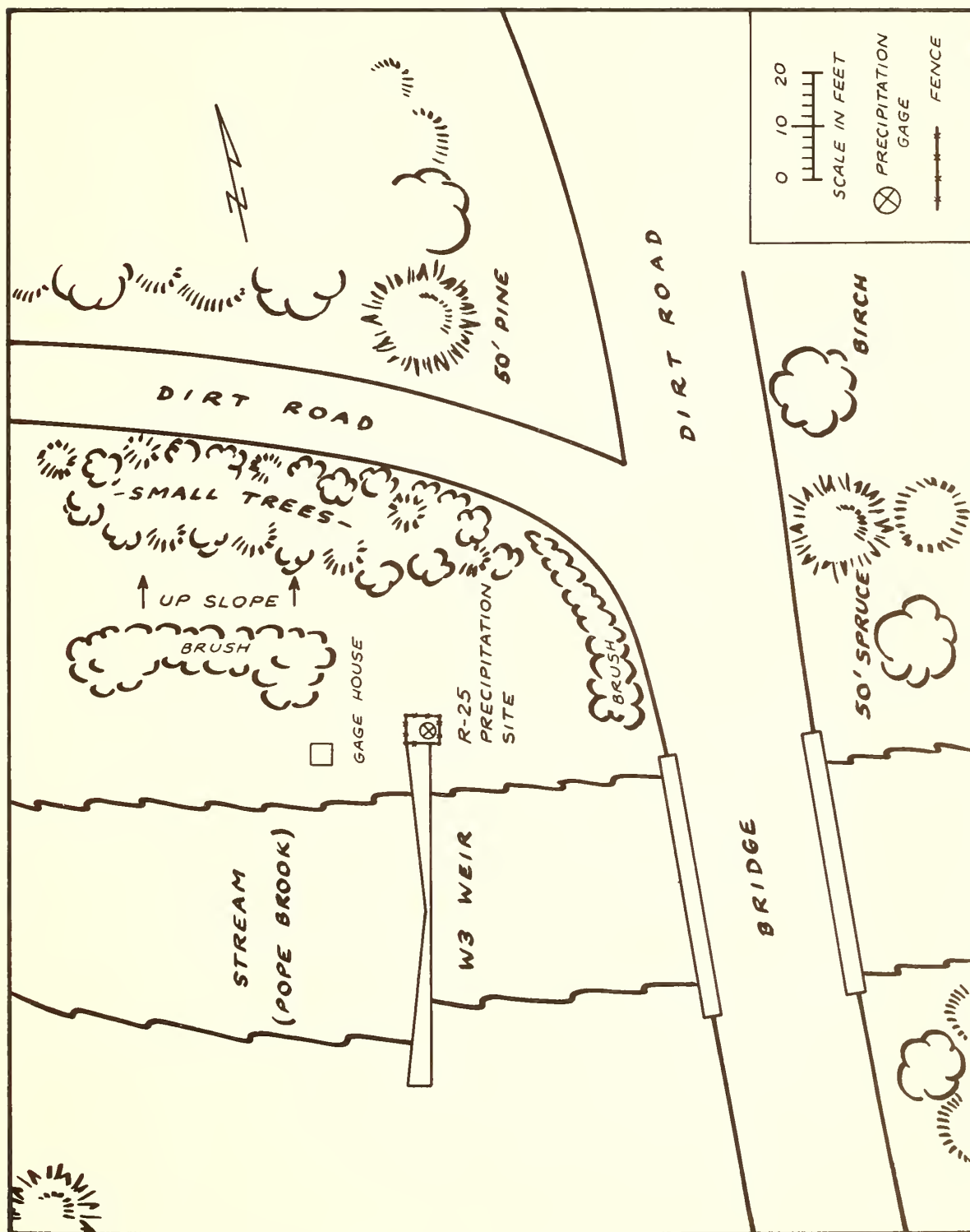


Figure 3.19. Site diagram of station R-25 and the W-3 weir (elevation is 1140 ft).



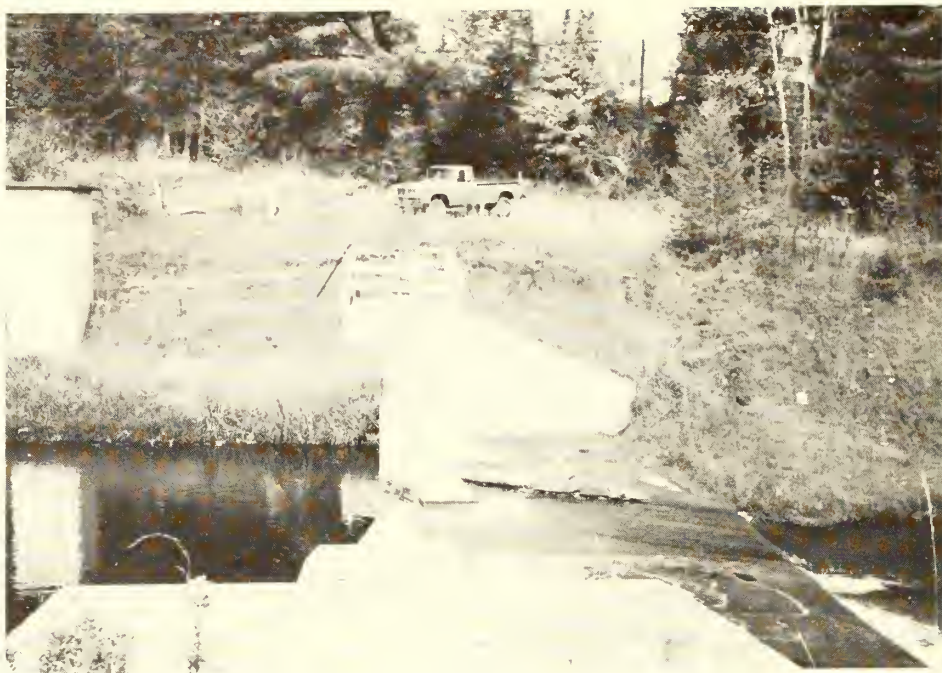


Figure 3.20. Side view of the W-3 weir (gage height is approximately 0.4 feet).



Figure 3.21. W-3 weir looking downstream.

gage at the snow research station. This combined record is still referred to as station R-3.

The height of the precipitation gages above the ground has varied slightly over the years. In the early 1960's, all gages were installed with the orifice approximately 3.5 feet above the surrounding terrain. During the winter of 1963, snow depths exceeded 3.5 feet for the first time since data records were initiated. This caused drifting snow to be deposited in some of the precipitation gages during portions of February and March. To overcome this problem, beginning in the fall of 1964, the gages were placed about six feet above the ground during the winter season. During the summer the gages were returned to the 3.5 foot height. Starting in the fall of 1973, the gages were left at the six foot height on a permanent basis.

Even though all of the precipitation gages are recording gages, some of the data were only tabulated on a daily basis. The rest of the data were tabulated on a breakpoint basis (the time and accumulation are tabulated whenever there is a change in slope on the precipitation chart). The breakpoint tabulations were converted to hourly precipitation records for use in this publication. Table 3.2 summarizes the precipitation data included in this report. All daily totals are for the period beginning and ending at midnight. The precipitation data for the individual stations, with no adjustments for inconsistencies, are included on the magnetic tape (see chapter V for details on the contents and format of the magnetic tape).

Table 3.2  
Summary of individual station precipitation data

| Station I.D.                | Period of Record | Time interval<br>of the data |
|-----------------------------|------------------|------------------------------|
| R-1                         | 10/59 to 9/74    | hourly                       |
| R-3                         | 1/61 to 9/74     | hourly                       |
| R-4                         | 1/64 to 9/74     | hourly                       |
| R-6+6A<br>(combined record) | 1/62 to 9/74     | daily                        |
| R-7                         | 10/59 to 12/63   | hourly                       |
| R-12                        | 10/59 to 9/74    | hourly                       |
| R-16                        | 10/59 to 9/74    | daily                        |
| R-25                        | 1/67 to 9/74     | daily                        |
| R-29                        | 6/64 to 9/74     | daily                        |

### Consistency Checks

The consistency of the precipitation data was checked by generating double-mass plots for each station. The deviation of the accumulated precipitation for each station from the mean precipitation at a base group of stations was plotted against the accumulated mean for the base group. The base group was comprised of the three stations which have data for the entire period of record; R-1, R-12, and R-16. Separate plots were generated for the winter

season (November through March) and the summer season (April through October). This was done to separate the gage catch during months when snowfall predominates from the catch during months when precipitation is normally rain.

In addition to checking the consistency of precipitation amounts, the timing of the precipitation, at least in terms of the day of occurrence, was checked. This was done by plotting the daily totals for each station versus the date of occurrence. In about 30 to 40 cases the evidence indicated that the precipitation at one of the stations had actually occurred on a different day than indicated by the original tabulation. All of these cases were corrected.

The double-mass plots indicated some inconsistencies. In addition, the double-mass plots identified months with questionable data. Such months were examined in detail to determine if the daily totals were reasonable or if the data were obviously in error. Questionable data occurred during two periods. The first was at the very beginning of the period of record (10/59 to 2/60). An examination of the original charts indicated the questionable data were caused by the funnel being in the gage during an early season snowfall, clock stoppages, and snow adhering to the sides of the gage. When possible the data were adjusted based on the other gages. In the remaining cases the tabulated data were converted to missing values. The second period of questionable data occurred during February and March of 1963. The cause in this case was, as mentioned previously, drifting snow being deposited in some of the gages. The primary gages affected were R-1 and R-6. All questionable data during this period were converted to missing values.

Table 3.3

Adjustment factors needed to make the precipitation data consistent

| Station I.D. | Applicable Period | Season | Adjustment Factor | Reason for Adjustment                           |
|--------------|-------------------|--------|-------------------|-------------------------------------------------|
| R-1          | 4/70-9/74         | Summer | 0.87              | Unknown                                         |
| R-3          | 5/61-5/62         | Summer | 1.09              | Unknown                                         |
| R-6+6A       | 1/62-7/72         | Winter | 1.14              | Shield installed 8/72                           |
| R-6+6A       | 7/73-9/74         | Winter | 0.92              | Station moved to site R-6A                      |
| R-6+6A       | 4/70-9/74         | Summer | 0.85              | Unknown                                         |
| R-16         | 7/72-9/74         | Summer | 0.95              | Unknown                                         |
| R-29         | 8/73-1/74         | Summer | 1.11              | Vandals damaged gage-new gage installed 1/31/74 |
|              |                   | Winter | 1.33              |                                                 |



Table 3.3 lists the adjustments that are needed to make the data consistent as determined from the double-mass plots. The reasons for the adjustments could not always be determined from the available records. Nevertheless, even though the cause was unknown, relatively minor inconsistencies could be identified because of the large number of gages located within a small area. The adjustments were used in computing mean areal precipitation, but are not applied to the precipitation data for the individual stations contained on the magnetic tape.

#### Mean Areal Precipitation

In addition to compiling the data for each station, mean areal precipitation estimates were computed for the W-3 watershed. The method used to compute mean areal precipitation (MAP) is the MAP procedure of the National Weather Service River Forecast System [Staff, Hydrologic Research Laboratory, 1972]. In this procedure missing values and the hourly distribution of daily amounts are estimated from the precipitation data at surrounding stations. The estimator stations are weighted in proportion to the reciprocal of the distance squared. Thus, by using this procedure a complete (no missing values) hourly precipitation record is generated for each station from the incomplete hourly and daily records that were compiled for each gage. The station weight for each station is then applied to this set of complete hourly precipitation records in order to compute the MAP time series for the area under consideration.

Station weights can be computed solely as a function of the x, y location of the station (Thiessen or grid-point weights), or, in the case of mountainous areas, station weights are usually based on an isohyetal analysis. After checking the raw data and applying the consistency adjustments, the next step in the isohyetal analysis for the W-3 watershed was to develop seasonal precipitation-elevation relationships. Fig. 3.22 shows these relationships for the 15 year period, 10/59 through 9/74. It also shows that for the W-3 watershed most of the long-term variability in precipitation is directly related to elevation. Thus, station weights should be primarily related to the elevation, as well as the location of each station. Using these two factors as guides, the W-3 watershed was subjectively divided among the existing precipitation gages. The resulting station weights used to compute mean areal precipitation are given in Table 3.4.

Table 3.4

#### Station weights for MAP computations

| <u>Station I.D.</u> | <u>Station Weight</u> |
|---------------------|-----------------------|
| R-1                 | 0.10                  |
| R-3                 | 0.11                  |
| R-6+6A              | 0.23                  |
| R-16                | 0.29                  |
| R-25                | 0.08                  |
| R-29                | 0.19                  |
| R-4, R-7, and R-12  | 0.0                   |



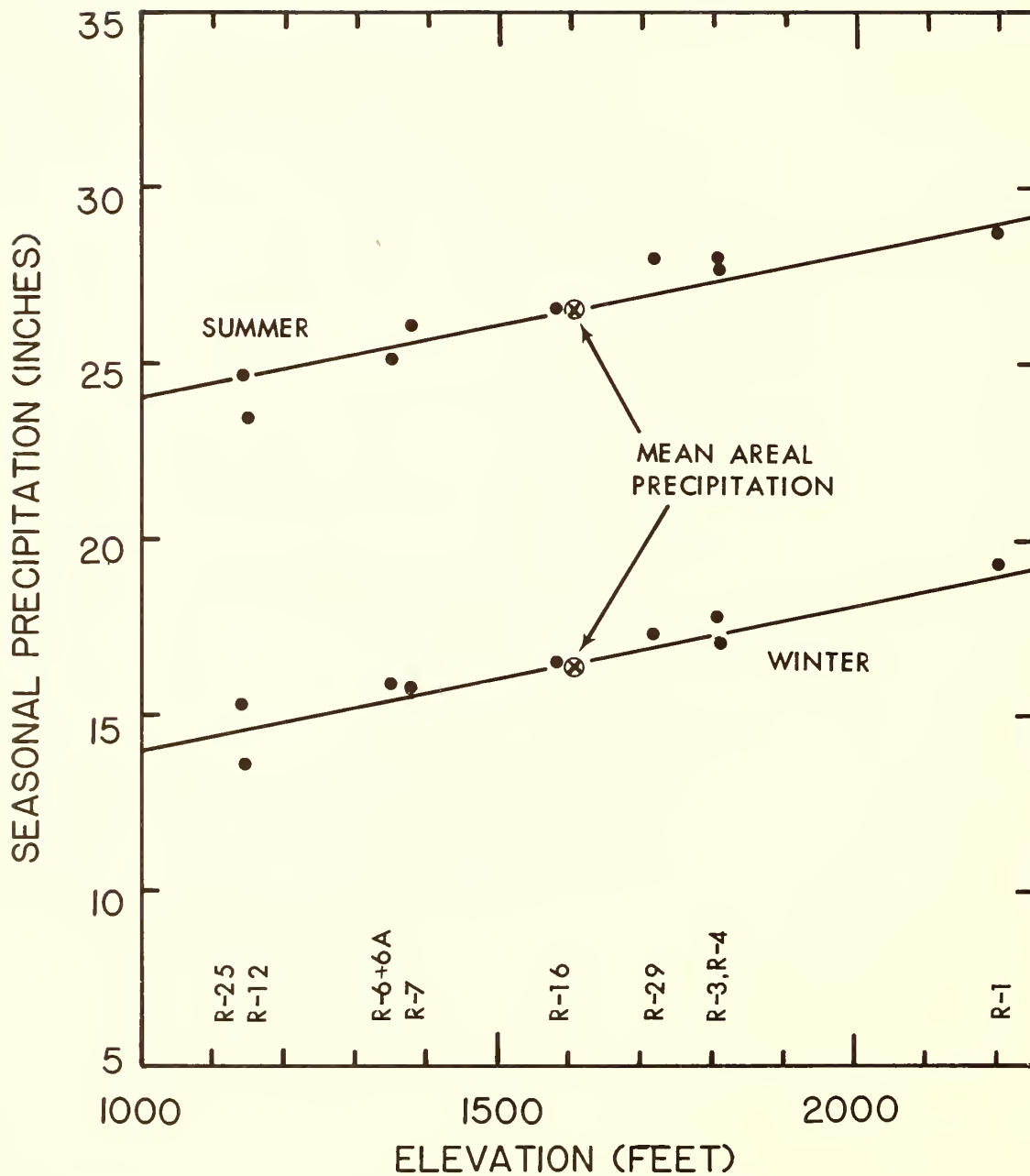


Figure 3.22. Seasonal precipitation-elevation relationships for the W-3 watershed (based on period from 10/59 to 9/74; winter is November-March and summer is April-October).

MAP estimates for the W-3 watershed are given for 5 time intervals. Table 3.5 gives the monthly and annual MAP values for the 15 year period. Daily MAP estimates are plotted (along with mean daily discharge, max and min temperature, and snow cover water-equivalent) and tabulated in Appendix A. Daily, six-hourly, and hourly MAP data are included on the magnetic tape. Hourly MAP for selected events is also plotted (along with instantaneous discharge) in Appendix B.

### Summary

Precipitation data for 9 stations located within or near the W-3 watershed are included on the magnetic tape. Daily data are given for all stations. Hourly values are also included for 5 of the gages. In addition, the individual gage data are used to compute mean areal precipitation for the W-3 watershed. Hourly, six-hourly, daily, and monthly tabulations of MAP are included. The overall quality of the MAP estimates is believed to be very good. The data for the first four water years (1960-1963) are probably of a lower quality, especially the winter data, than the data for the remaining years. This is because of a couple of questionable data periods during these years. Even though the gage sites are reasonably well protected from wind effects or wind shields have been installed, there is undoubtedly some deficiency in gage catch during snowfall periods. Based on precipitation gage catch comparisons conducted near the NOAA-ARS snow research station [Larson (1972)], the average deficiency during snowfall periods is probably in the range of 10 to 15 percent.

### III.3 AIR TEMPERATURE DATA

#### Air Temperature Stations

The variability of air temperature values over the W-3 watershed is generally less than the variability in precipitation amounts. Thus primarily because of the conservative nature of spatial variations in air temperature, temperature data are only furnished for one measurement site. Other reasons for not including more stations are that air temperature was only recorded at a few of the stations and the data for most of the stations have not been reduced for the entire period of record. Air temperature data are provided for measurement site R-3. The elevation of this site is 1810 feet which is only slightly greater than the mean elevation of the watershed (1610 feet, see Fig. 2.3). The air temperature record for this location is a combination of data from 3 measurement sites. Air temperature data from the NOAA-ARS snow research station (located 150 feet southwest of R-3) are used for the periods December 1968 through April 1969 and November 1969 through September 1974 (instrumentation described in chapter V). Thermograph measurements of air temperature at station R-3 are used from the initiation of that station on November 24, 1960 through November 1968 and from May 1969 through October 1969. Prior to November 24, 1960, the closest available continuous measurements of air temperature were from a thermograph at station R-12. These data were adjusted to the R-3 measurement site.

Table 3.5

Monthly and annual mean areal precipitation for the W-3 watershed  
(Values are in inches)

| Water<br>Year | Oct. | Nov. | Dec. | Jan. | Feb. | March | April | May  | June  | July | Aug. | Sept. | Annual |
|---------------|------|------|------|------|------|-------|-------|------|-------|------|------|-------|--------|
| 1960          | 9.62 | 5.76 | 4.25 | 2.78 | 3.69 | 1.80  | 3.73  | 3.84 | 3.58  | 3.69 | 1.59 | 4.48  | 48.81  |
| 1961          | 4.38 | 2.88 | 2.02 | 1.14 | 2.74 | 2.58  | 4.50  | 3.08 | 6.42  | 4.05 | 3.29 | 1.68  | 38.76  |
| 1962          | 1.87 | 3.32 | 3.01 | 2.29 | 2.63 | 2.12  | 3.80  | 2.82 | 3.04  | 5.95 | 3.43 | 4.21  | 38.49  |
| 1963          | 7.42 | 2.74 | 2.26 | 2.23 | 2.78 | 3.13  | 4.59  | 3.08 | 1.87  | 3.08 | 5.26 | 1.64  | 40.08  |
| 1964          | 0.51 | 5.76 | 1.93 | 2.78 | 1.32 | 4.48  | 3.45  | 4.27 | 2.05  | 3.41 | 5.28 | 1.40  | 36.64  |
| 1965          | 2.37 | 3.63 | 3.28 | 1.78 | 2.93 | 0.89  | 2.24  | 0.71 | 4.80  | 3.57 | 6.90 | 4.48  | 37.58  |
| 1966          | 4.60 | 5.23 | 2.14 | 1.82 | 2.20 | 4.32  | 1.22  | 3.95 | 3.68  | 2.58 | 4.42 | 3.34  | 39.50  |
| 1967          | 2.28 | 2.82 | 3.32 | 1.56 | 2.12 | 0.80  | 4.20  | 6.00 | 3.00  | 4.93 | 3.49 | 2.66  | 37.18  |
| 1968          | 5.17 | 3.10 | 4.16 | 1.76 | 1.43 | 3.93  | 3.45  | 3.33 | 4.66  | 2.50 | 3.23 | 3.04  | 39.76  |
| 1969          | 3.18 | 5.47 | 5.63 | 3.15 | 3.44 | 2.14  | 3.57  | 5.18 | 4.53  | 4.78 | 3.43 | 2.55  | 47.05  |
| 1970          | 2.61 | 6.08 | 5.68 | 0.99 | 3.21 | 2.34  | 3.81  | 3.31 | 4.18  | 1.28 | 4.32 | 3.10  | 40.91  |
| 1971          | 1.91 | 2.59 | 4.83 | 2.75 | 4.23 | 3.79  | 2.55  | 3.31 | 2.32  | 4.03 | 9.27 | 1.59  | 43.17  |
| 1972          | 2.44 | 4.02 | 3.64 | 2.17 | 2.44 | 5.02  | 2.50  | 3.62 | 5.37  | 6.02 | 2.61 | 1.30  | 41.15  |
| 1973          | 3.61 | 5.74 | 6.40 | 3.80 | 1.95 | 2.71  | 4.40  | 5.93 | 10.67 | 3.12 | 4.04 | 4.93  | 57.30  |
| 1974          | 2.75 | 5.17 | 8.59 | 2.96 | 3.40 | 5.18  | 4.98  | 6.50 | 3.81  | 6.12 | 2.34 | 4.19  | 55.99  |
| AVG.          | 3.65 | 4.29 | 4.08 | 2.26 | 2.70 | 3.02  | 3.53  | 3.93 | 4.27  | 3.94 | 4.19 | 2.97  | 42.82  |

## Consistency Checks

In order to create the combined record for station R-3, it was first necessary to check the consistency of the data from each individual station. This was done by checking the consistency of the maximum and minimum temperature data for each station. The method used [Anderson (1973)] is to plot the accumulated deviation of the mean monthly temperature at each station from the average mean monthly temperature for a base group of stations against the accumulation of time in months. Separate plots are generated for maximum and minimum temperature data. The consistency analysis included max-min data from R-3 (11/60-12/69), the snow research station, R-12 (10/59-9/74), plus NOAA climatological data stations located at St. Johnsbury, McIndoe Falls, Newport, Montpelier, Mt. Mansfield, and West Burke, all located in Vermont. These plots showed that the temperature data from station R-3 and the snow research station were not only consistent, but could be considered to be identical. The data from station R-12 were also consistent with the data from the other stations, but needed to be adjusted to represent temperatures at the R-3 site. The adjustment for maximum temperatures, as determined from the plots, was  $-1.7^{\circ}\text{F}$ , which indicates a lapse rate of  $-2.6^{\circ}\text{F}/1000$  feet. For minimum temperatures the adjustment was  $0.4^{\circ}\text{F}$  or a lapse rate of  $0.6^{\circ}\text{F}/1000$  feet. Thus, maximum air temperatures at station R-3 are typically colder than at R-12 while minimum temperatures are generally warmer. These adjustments were used to alter the temperature record at station R-12 for the period 10/59 through 12/60.

## Temperature Data and Form of Precipitation

Hourly air temperatures for the 3 stations (snow research station, R-3, and R-12), plus station R-12 adjusted to the R-3 site, are contained on the magnetic tape. Mean monthly and daily maximum and minimum temperatures, plus mean six-hourly temperatures are provided for the combined record at the R-3 measurement site. Table 3.6 lists the mean monthly maximum and minimum temperatures for the 15-year period. The daily maximum and minimum temperatures for the period from midnight to midnight are plotted and tabulated in Appendix A, as well as being included on the magnetic tape. The mean six-hourly temperatures for the R-3 measurement site are contained on the magnetic tape.

Among other things, air temperature data are frequently used to determine the form of precipitation. At the NOAA-ARS snow research station the precipitation generally occurs as snow when the temperature is  $33^{\circ}\text{F}$  or below. Above  $33^{\circ}\text{F}$  the precipitation is typically rain. However, rain can occur at temperatures below  $34^{\circ}\text{F}$  and snow occurs when the temperature is above  $33^{\circ}\text{F}$ . Using the six-hourly temperature time series at the R-3 site, the form of precipitation based on the previously mentioned temperature criterion was compared to the observed form of the precipitation. Prior to the establishment of the snow research station, the observed form of the precipitation had to be inferred from the response of the stream hydrograph. Thus, only in the case of larger storms could it be determined whether the form of the precipitation based on the temperature criterion was correct. In the later years the observed form of the precipitation was generally recorded in the snow research station log. Table 3.7 lists those periods during which the observed



Table 3.6  
Mean monthly maximum and minimum temperature for the R-3 measurement site

|       |      | Maximum Temperature (°F) |      |      |      |      |      |      |      |      |      |       |  |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|--|
| Water |      |                          |      |      |      |      |      |      |      |      |      |       |  |
| Year  | Oct. | Nov.                     | Dec. | Jan. | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. |  |
| 1960  | 48.0 | 41.0                     | 28.6 | 24.4 | 28.5 | 27.2 | 47.6 | 67.0 | 71.3 | 72.0 | 72.2 | 64.6  |  |
| 1961  | 51.2 | 40.7                     | 22.9 | 17.4 | 29.6 | 33.5 | 40.4 | 56.2 | 69.1 | 71.9 | 70.3 | 71.7  |  |
| 1962  | 56.8 | 37.2                     | 25.9 | 22.3 | 21.8 | 37.5 | 46.6 | 58.4 | 69.5 | 67.7 | 68.7 | 59.0  |  |
| 1963  | 50.3 | 37.8                     | 23.7 | 20.2 | 19.0 | 33.3 | 44.6 | 61.0 | 73.5 | 75.9 | 67.2 | 63.4  |  |
| 1964  | 62.5 | 42.3                     | 17.0 | 25.9 | 25.1 | 34.8 | 48.3 | 67.3 | 71.8 | 76.4 | 67.3 | 63.8  |  |
| 1965  | 51.8 | 38.6                     | 30.0 | 19.4 | 24.2 | 32.4 | 44.9 | 65.9 | 71.3 | 70.6 | 71.6 | 64.7  |  |
| 1966  | 50.5 | 34.5                     | 28.9 | 22.5 | 27.5 | 35.7 | 43.0 | 57.0 | 71.6 | 75.5 | 71.3 | 59.9  |  |
| 1967  | 51.8 | 42.6                     | 26.4 | 27.0 | 20.6 | 31.6 | 44.4 | 51.8 | 75.0 | 75.2 | 72.1 | 65.8  |  |
| 1968  | 52.7 | 32.2                     | 26.7 | 17.4 | 18.1 | 36.9 | 53.8 | 58.4 | 65.0 | 75.1 | 68.5 | 67.7  |  |
| 1969  | 53.9 | 34.2                     | 21.3 | 23.5 | 25.8 | 29.3 | 44.8 | 56.9 | 70.1 | 71.7 | 73.3 | 63.0  |  |
| 1970  | 51.7 | 39.7                     | 23.2 | 12.7 | 25.0 | 31.3 | 46.2 | 61.2 | 68.6 | 74.4 | 72.3 | 61.6  |  |
| 1971  | 54.3 | 40.4                     | 19.4 | 15.7 | 24.7 | 29.0 | 41.8 | 58.8 | 70.4 | 72.6 | 70.1 | 65.8  |  |
| 1972  | 58.2 | 34.6                     | 27.0 | 24.8 | 21.3 | 29.7 | 39.0 | 61.7 | 64.9 | 72.2 | 69.2 | 63.6  |  |
| 1973  | 46.4 | 33.1                     | 25.9 | 24.5 | 22.2 | 39.6 | 47.1 | 55.6 | 69.1 | 74.8 | 74.5 | 60.4  |  |
| 1974  | 53.7 | 35.8                     | 29.3 | 23.6 | 21.0 | 30.6 | 46.7 | 52.8 | 68.9 | 71.3 | 71.4 | 59.8  |  |
| AVG.  | 52.9 | 37.6                     | 25.1 | 21.4 | 23.6 | 32.8 | 45.2 | 59.3 | 70.0 | 73.2 | 70.7 | 63.6  |  |

|       |      | Minimum Temperature (°F) |      |      |      |      |      |      |      |      |      |       |  |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|--|
| Water |      |                          |      |      |      |      |      |      |      |      |      |       |  |
| Year  | Oct. | Nov.                     | Dec. | Jan. | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. |  |
| 1960  | 34.2 | 26.5                     | 16.1 | 7.4  | 13.0 | 12.2 | 30.0 | 46.0 | 49.6 | 51.0 | 48.2 | 44.5  |  |
| 1961  | 31.8 | 27.8                     | 5.4  | -2.1 | 9.3  | 13.9 | 27.5 | 36.1 | 47.1 | 51.9 | 51.4 | 50.2  |  |
| 1962  | 35.6 | 25.7                     | 13.7 | .2   | 1.5  | 18.0 | 26.9 | 36.8 | 47.2 | 48.6 | 50.5 | 42.5  |  |
| 1963  | 36.0 | 23.2                     | 7.0  | 7.0  | .8   | 16.7 | 28.9 | 37.7 | 48.9 | 54.0 | 48.5 | 39.2  |  |
| 1964  | 37.7 | 31.2                     | 1.9  | 9.6  | 5.1  | 16.6 | 27.9 | 42.0 | 41.8 | 54.2 | 46.2 | 39.3  |  |
| 1965  | 32.8 | 22.4                     | 14.4 | .2   | 2.4  | 14.0 | 25.7 | 40.0 | 46.2 | 47.0 | 50.5 | 43.7  |  |
| 1966  | 34.0 | 19.9                     | 15.9 | 5.9  | 8.4  | 17.4 | 26.8 | 35.4 | 48.2 | 53.0 | 51.1 | 41.2  |  |
| 1967  | 32.7 | 28.6                     | 12.0 | 11.0 | -1.5 | 10.9 | 27.0 | 34.2 | 52.4 | 54.9 | 52.5 | 43.6  |  |
| 1968  | 37.4 | 18.6                     | 12.0 | -3.1 | .4   | 17.3 | 30.3 | 37.3 | 48.9 | 52.6 | 48.7 | 47.5  |  |
| 1969  | 37.3 | 22.4                     | 8.0  | 8.0  | 11.9 | 16.0 | 26.9 | 36.5 | 47.0 | 51.9 | 52.8 | 43.9  |  |
| 1970  | 32.3 | 26.1                     | 10.8 | -4.1 | 3.2  | 15.4 | 27.9 | 41.8 | 48.7 | 55.6 | 52.9 | 46.2  |  |
| 1971  | 38.9 | 28.2                     | 5.9  | -1.9 | 8.7  | 14.8 | 27.2 | 39.5 | 47.6 | 52.5 | 52.1 | 49.2  |  |
| 1972  | 41.0 | 21.3                     | 10.3 | 3.2  | 2.1  | 13.6 | 25.3 | 42.1 | 50.4 | 54.4 | 51.3 | 43.6  |  |
| 1973  | 29.7 | 23.0                     | 11.4 | 6.2  | 2.7  | 26.2 | 30.3 | 40.1 | 52.4 | 56.7 | 57.2 | 44.3  |  |
| 1974  | 36.0 | 25.4                     | 14.2 | 5.9  | 1.8  | 12.7 | 28.7 | 37.0 | 48.5 | 53.4 | 52.3 | 43.9  |  |
| AVG.  | 35.2 | 24.7                     | 10.6 | 3.5  | 4.7  | 15.7 | 27.8 | 38.8 | 48.3 | 52.8 | 51.1 | 44.2  |  |

Table 3.7

Periods during which the observed form of the precipitation differs from the form determined from air temperature data

| Period   |              | Six-hourly mean air<br>temperatures - °F | Observed form<br>of precipitation |
|----------|--------------|------------------------------------------|-----------------------------------|
| 4/16/61  | 1200 to 2400 | 33, 30                                   | rain                              |
| 4/26/61  | 0000 to 0600 | 33                                       | rain                              |
| 5/2/61   | 0600 to 1800 | 31, 30                                   | rain                              |
| 10/31/61 | 1800 to 2400 | 33                                       | rain                              |
| 11/1/61  | 0000 to 1200 | 33, 33                                   | rain                              |
| 11/27/61 | 1200 to 1800 | 34                                       | snow                              |
| 1/7/62   | 0600 to 1200 | 33                                       | rain                              |
| 2/5/62   | 1800 to 2400 | 33                                       | rain                              |
| 3/31/62  | 1200 to 1800 | 33                                       | rain                              |
| 4/13/62  | 0000 to 1200 | 34, 34                                   | snow                              |
| 11/16/63 | 0600 to 1200 | 35                                       | snow                              |
| 11/16/64 | 1200 to 2400 | 32, 33                                   | rain                              |
| 2/25/65  | 1200 to 1800 | 32                                       | rain                              |
| 4/12/65  | 0600 to 1200 | 33                                       | rain                              |
| 12/24/65 | 0600 to 1200 | 33                                       | rain                              |
| 3/1/66   | 0000 to 0600 | 35                                       | snow                              |
| 4/15/67  | 0600 to 1200 | 33                                       | rain                              |
| 4/18/67  | 0000 to 1200 | 32, 33                                   | rain                              |
| 11/23/67 | 0600 to 1200 | 32                                       | rain                              |
| 11/23/67 | 1800 to 2400 | 30                                       | rain                              |
| 12/3/67  | 1200 to 1800 | 31                                       | rain                              |
| 2/3/68   | 0600 to 1200 | 31                                       | rain                              |
| 11/7/68  | 1800 to 2400 | 33                                       | rain                              |
| 11/18/68 | 1800 to 2400 | 33                                       | rain                              |
| 12/5/68  | 0000 to 0600 | 31                                       | rain                              |
| 3/18/69  | 0600 to 1200 | 30                                       | rain                              |
| 3/25/69  | 1200 to 1800 | 34                                       | snow                              |
| 3/29/69  | 1200 to 1800 | 34                                       | snow                              |

Table 3.7 (Cont'd)

| Period   |                      | Six-hourly mean air<br>temperatures - °F | Observed form<br>of precipitation |
|----------|----------------------|------------------------------------------|-----------------------------------|
| 4/2/69   | 0600 to 1200         | 32                                       | rain                              |
| 4/19/69  | 0000 to 0600         | 33                                       | rain                              |
| 1/29/70  | 1800 to 2400         | 32                                       | rain                              |
| 3/4/70   | 1800 to 3/5/70 0600  | 28, 27                                   | rain                              |
| 3/20/70  | 1800 to 2400         | 36                                       | snow                              |
| 4/20/70  | 0600 to 2400         | 33, 33, 33                               | rain                              |
| 11/23/70 | 0000 to 0600         | 38                                       | snow                              |
| 2/12/71  | 1200 to 1800         | 33                                       | rain                              |
| 2/14/71  | 0600 to 1200         | 30                                       | rain                              |
| 2/27/71  | 0000 to 0600         | 33, 32                                   | rain                              |
| 4/10/71  | 1200 to 1800         | 34                                       | snow                              |
| 12/9/71  | 1800 to 2400         | 33                                       | rain                              |
| 12/15/71 | 1800 to 2400         | 33                                       | rain                              |
| 12/24/71 | 1800 to 2400         | 33                                       | rain                              |
| 3/2/72   | 0000 to 1800         | 31, 30, 33                               | rain                              |
| 3/22/72  | 0600 to 1800         | 32, 33                                   | rain                              |
| 11/20/72 | 0600 to 1200         | 33                                       | rain                              |
| 11/26/72 | 0000 to 0600         | 30                                       | rain                              |
| 12/6/72  | 1800 to 2400         | 33                                       | rain                              |
| 12/13/72 | 0600 to 1200         | 33                                       | rain                              |
| 12/31/72 | 1200 to 1800         | 32                                       | rain                              |
| 11/27/73 | 1200 to 1800         | 33                                       | rain                              |
| 12/9/73  | 1200 to 1800         | 32                                       | rain                              |
| 12/14/73 | 0600 to 1200         | 32                                       | rain                              |
| 12/20/73 | 1800 to 2400         | 32                                       | rain                              |
| 12/28/73 | 0600 to 1200         | 33                                       | rain                              |
| 1/21/74  | 1200 to 1/22/74 0600 | 28, 33 33                                | rain                              |
| 3/17/74  | 0000 to 0600         | 32                                       | rain                              |
| 3/24/74  | 0600 to 1200         | 31                                       | rain                              |

form of the precipitation differs from the form indicated by the temperature criterion. During some of these periods rain could have occurred during a portion of the six-hour period and snow during the remainder, or the precipitation could have occurred as snow over part of the watershed and rain over the rest of the watershed. Table 3.7 indicates the dominant form of the precipitation.

### Summary

The overall quality of the combined air temperature record for the R-3 measurement site is very good. This record should be an adequate estimate of the mean air temperature over the W-3 watershed. Air temperature lapse rates vary with meteorological conditions. This is evident when comparing the adjusted R-12 data to that observed at station R-3 during the short period of overlapping records (11/24/60-12/31/60). Generally the adjusted R-12 temperatures are similar to those measured at R-3. Nevertheless, on some days the adjusted R-12 temperatures differ from the R-3 observations by as much as 10°F, indicating a deviation from the normal lapse rates. However, since the elevation of the R-3 site is close to the mean elevation of the W-3 watershed, air temperatures at R-3 should be reasonable estimates of the mean temperature over the W-3 watershed even when the lapse rates deviate from normal.

In addition to variations of temperature with elevation, other physiographic factors influence the spatial variability of air temperature. From February to May 1974 a brief study was conducted to determine the effect of forest cover on air temperature within the W-3 watershed. A thermograph in a cotton region shelter was placed in a very dense grove of spruce trees located about 800 feet SE of the snow research station. A comparison of the temperature record in the dense forest with temperatures measured in the open at the snow research station show that the maximum temperature, on the average, is 2 to 3°F cooler and the minimum temperature 1 to 2°F warmer in the forest than at the open site. The greatest differences occur during clear sky periods. When overcast conditions exist, the temperature differences are negligible. The largest measured difference in daytime temperatures was 9°F cooler in the forest. For nighttime temperatures, the largest difference was 6°F warmer in the forest than at the open site. An examination of the aerial mosaic of the W-3 watershed (Fig. 2.2) indicates that such dense groves of conifers occupy only a relatively small portion of the watershed. Thus, after considering the effects of elevation and forest cover on the spatial variability of air temperature, it must still be concluded that the combined temperature record at the R-3 measurement site is a good estimate of the mean temperature over the W-3 watershed.

### III.4 STREAMFLOW DATA

This section describes the streamflow data for the W-3 watershed that are included in this publication. This includes information on the weir and its operations, the rating curve for the weir, consistency checks, and the various data displays.

#### Streamflow Measurements

Streamflow measurements for the W-3 watershed are made at weir 3 (W-3) of



the ARS Sleepers River Research Watershed. This weir is a 16 inch wide concrete weir, constructed on bedrock with a 5:1 notch slope. The elevation of the weir site is 1135 feet (m.s.l.). A continuous stage record using a Stevens A-35 recorder was initiated in December of 1959. The data record contained in this publication begins on January 1, 1960, and continues through water year 1974. The weir site is checked frequently for silt deposits at the intake, clock accuracy and stoppages, gage height errors, ice build up at the weir notch, and annually for datum reference. Appendix G contains a history of the operation of the weir site. The original weir notch was raised by 18 inches in July 1963 in an attempt to get a better control. Otherwise the conditions at the weir site have remained reasonably unchanged.

### Rating Curves

The stage-discharge relationships for the W-3 weir were developed from periodic streamgaging measurements. From 1960 to 1963 a series of streamgaging measurements were taken in an attempt to define the rating curve. Approximately 30 measurements were made using Price current meters over a gage height range of 0.41 to 1.58 feet. A rating curve was established by determining a best fit line on a logarithmic plot of gage height versus discharge. In 1963 it was decided that a satisfactory rating could not be obtained because the stream gradient was too steep and the pool behind the weir so small that the velocity head was not negligible. Therefore, in July 1963, 18 inches of additional concrete were added to the weir to raise the notch and thus create a larger and deeper pool. After the weir notch was raised, another series of streamgaging measurements was made between 1963 and 1968. About 40 measurements were made over a gage height range of 0.35 to 1.58 feet. A rating curve was again established by determining two best fit lines (one for gage heights below 0.63 feet and another for gage heights above that level) on a logarithmic stage-discharge plot. In recent years several studies indicated that these original rating curves were questionable, especially with regard to the higher stages (the maximum stage of record is 3.4 feet on June 30, 1973). Even with the higher weir notch and somewhat larger pool, it is doubtful that the velocity head is negligible for stages above 1.5 feet. Therefore, a new series of streamgaging measurements were made in 1976.

The 1976 series of streamgaging measurements were begun in April and continued through August. All measurements were made in the general vicinity of the walkway over the brook upstream from the W-3 weir (see Fig. 3.18). Unfortunately, no extreme stages were encountered during this period, however, the range of gage heights, 0.42 to 2.03 feet, exceeded those obtained during the previous series of streamgaging measurements. Table 3.8 lists the summary data for the 1976 streamgaging measurements. As can be seen from Table 3.8, a pygmy Price meter was used for almost all measurements below a gage height of 0.75 feet. The available information indicates that pygmy meters were not used during the earlier streamgaging measurements.

The theoretical equation for the discharge over a 5:1 V-notch weir with no losses can be expressed as:

$$Q = 21.4 \cdot H_t^{2.5} , \quad (3.1)$$

Table 3.8  
Summary of streamgaging measurements during 1976

| Number | Date | Gage<br>Height(ft) | Discharge<br>(cfs) | Mean<br>Velocity(ft/sec) | Meter |
|--------|------|--------------------|--------------------|--------------------------|-------|
| 1      | 4/5  | 1.255              | 25.4               | 1.74                     |       |
| 2      | 4/5  | 1.30               | 30.5               | 1.70                     |       |
| 3      | 4/5  | 1.30               | 27.7               | 1.68                     |       |
| 4      | 4/6  | 1.225              | 22.6               | 1.52                     |       |
| 5      | 4/6  | 1.23               | 24.7               | 1.52                     |       |
| 6      | 4/6  | 1.30               | 28.8               | 1.72                     |       |
| 7      | 4/7  | 1.34               | 29.2               | 1.77                     |       |
| 8      | 4/8  | 1.18               | 20.3               | 1.47                     |       |
| 9      | 4/8  | 1.195              | 21.2               | 1.52                     |       |
| 10     | 4/15 | 1.105              | 17.9               | 1.45                     |       |
| 11     | 4/15 | 1.145              | 21.1               | 1.82                     |       |
| 12     | 4/17 | 1.56               | 48.4               | 2.07                     |       |
| 14     | 4/17 | 1.89               | 73.4               | 2.63                     |       |
| 17     | 4/28 | 1.065              | 16.9               | 1.24                     |       |
| 18     | 4/28 | 1.085              | 17.6               | 1.25                     |       |
| 19     | 4/28 | 1.095              | 18.0               | 1.26                     |       |
| 20     | 4/29 | .97                | 11.5               | .96                      |       |
| 21     | 4/29 | .96                | 11.6               | 1.00                     |       |
| 22     | 4/29 | .96                | 11.7               | .98                      |       |
| 23     | 5/2  | 1.03               | 14.9               | 1.14                     |       |
| 24     | 5/7  | 1.015              | 13.8               | 1.05                     |       |
| 25     | 5/12 | 1.395              | 31.2               | 1.70                     |       |
| 26     | 5/12 | 1.405              | 31.5               | 1.74                     |       |
| 27     | 5/12 | 1.295              | 26.5               | 1.57                     |       |
| 28     | 5/12 | 1.21               | 24.4               | 1.51                     |       |
| 29     | 5/12 | 1.19               | 20.3               | 1.28                     |       |
| 30     | 5/13 | .96                | 11.4               | 1.00                     |       |
| 31     | 5/13 | .91                | 10.4               | .91                      |       |
| 32     | 5/14 | .85                | 8.7                | .87                      |       |
| 34     | 6/2  | .72                | 5.4                | .64                      |       |

Table 3.8 (Cont'd)

| Number | Date | Gage<br>Height (ft) | Discharge<br>(cfs) | Mean<br>Velocity (ft/sec) | Meter |
|--------|------|---------------------|--------------------|---------------------------|-------|
| 35     | 6/8  | .68                 | 5.2                | .59                       | pygmy |
| 36     | 6/10 | .60                 | 3.40               | .41                       | pygmy |
| 37     | 6/15 | .52                 | 3.11               | .41                       | pygmy |
| 38     | 7/8  | .75                 | 6.1                | .69                       |       |
| 39     | 7/8  | .74                 | 6.2                | .68                       | pygmy |
| 40     | 7/8  | .715                | 6.0                | .71                       | pygmy |
| 41     | 7/8  | .69                 | 5.8                | .68                       | pygmy |
| 42     | 7/8  | .675                | 4.91               | .87                       | pygmy |
| 43     | 7/8  | .665                | 4.46               | .67                       |       |
| 44     | 7/9  | .625                | 4.60               | .70                       | pygmy |
| 45     | 7/15 | .505                | 2.62               | .45                       | pygmy |
| 46     | 7/15 | .50                 | 2.71               | .47                       | pygmy |
| 49     | 7/16 | .495                | 2.44               | .40                       |       |
| 50     | 7/16 | .49                 | 2.52               | .36                       |       |
| 51     | 7/22 | .45                 | 1.99               | .40                       | pygmy |
| 52     | 7/22 | .43                 | 1.84               | .38                       | pygmy |
| 53     | 7/23 | .43                 | 1.77               | .41                       | pygmy |
| 54     | 7/23 | .43                 | 2.06               | .42                       | pygmy |
| 55     | 7/23 | .425                | 1.97               | .41                       | pygmy |
| 56     | 7/23 | .42                 | 2.09               | .43                       | pygmy |
| 57     | 7/23 | .42                 | 1.97               | .42                       | pygmy |
| 58     | 7/28 | .605                | 4.03               | .56                       | pygmy |
| 59     | 7/28 | .595                | 3.92               | .54                       | pygmy |
| 60     | 8/5  | .455                | 2.40               | .45                       | pygmy |
| 61     | 8/5  | .45                 | 2.28               | .45                       | pygmy |
| 62     | 8/5  | .45                 | 2.36               | .45                       | pygmy |
| 63     | 8/10 | 1.435               | 33.8               | 1.71                      |       |
| 64     | 8/10 | 1.595               | 43.5               | 2.05                      |       |
| 65     | 8/10 | 1.945               | 77.4               | 2.86                      |       |
| 66     | 8/10 | 2.03                | 82.8               | 2.59                      |       |

Note: six measurements were omitted for various reasons.

where:  $Q$  = discharge (cfs), and

$H_t$  = total head (ft).

For an actual weir Eq. 3.1 can be expressed in a generalized form as:

$$Q = c_d \cdot 21.4 \cdot (H + \alpha \cdot h_o + h_c)^{2.5}, \quad (3.2)$$

where  $c_d$  = a discharge coefficient which is less than 1.0,

$H$  = gage height (ft),

$h_o$  = the velocity head based on the mean velocity (ft),

$\alpha$  = an adjustment factor which is the ratio of the true velocity head to the velocity head computed on the basis of the mean velocity, and

$h_c$  = a constant head correction (ft).

The adjustment factor,  $\alpha$ , is defined [Benson and Dalrymple, 1968] as:

$$\alpha = \frac{1}{A} \sum \left( \left( \frac{v}{V} \right)^3 \cdot \Delta A \right), \quad (3.3)$$

where:  $A$  = the total area of the cross section,

$v$  = the mean velocity of a small subarea  $\Delta A$ , and

$V$  = the mean velocity of the total cross section.

The adjustment factor,  $\alpha$ , used for the W-3 weir is 1.2. This value was computed from the streamgaging measurements and assumes that the velocity head at the streamgaging site is the same as at the point where the gage height is recorded. This is a reasonable assumption at the higher flows. At low flows the velocity head is less just upstream from the weir where the gage height is measured than at the streamgaging site. However, the velocity head is negligible at low flows at both locations. The constant head correction,  $h_c$ , can correct for datum differences or can be related to the geometry of the cross section of the weir [Horton (1907)].

In order to develop a rating curve based on Eq. 3.2 in which discharge is only a function of gage height, it is first necessary to express  $h_o$  solely as a function of  $H$ . From the streamgaging measurements the following relationship was computed:

$$h_o = 0.02 \cdot H^{2.6}, \quad (3.4)$$

with a correlation between  $H$  and  $h_o$  of 0.98. Available information indicates that Eq. 3.4 will give reasonable estimates of  $h_o$  for gage heights at least up to the maximum stage of record, though obviously the uncertainty of the estimate increases as the stage increases.



In order to determine if  $h_c$  has a value other than zero, the discharge coefficient,  $c_d$ , was plotted as a function of  $H + \alpha \cdot h_o$  for each of the streamgaging measurements. The values of  $c_d$  were reasonably constant above 0.75 foot, but increased significantly for lower values of  $H + \alpha \cdot h_o$ . This indicates that  $h_c$  is greater than zero. A value of  $h_c = 0.05$  foot makes  $c_d$  reasonably constant for all values of  $H + \alpha \cdot h_o \mp h_c$ . The best fit value of  $c_d$  is 0.54. Thus the rating curve for the W-3 weir, for the period after July 1963, can be expressed as:

$$Q = 11.55 \cdot (H + 0.024 \cdot H^{2.6} + 0.05)^{2.5}. \quad (3.5)$$

Fig. 3.23 shows a plot of Eq. 3.5 and the 1976 streamgaging measurements.

In order to determine if the rating has remained stable over the years, Eq. 3.5 was compared with the streamgaging measurements taken from July 1963 through 1968. This comparison is shown in Fig. 3.24. Indications are that the rating for the W-3 weir has remained stable with time since the notch was raised in July 1963.

A new rating curve was also established for the period prior to July 1963. The information needed to compute the velocity head is not included with the streamgaging records for that period. The assumption was made that  $\alpha = 1.2$  and Eq. 3.4 could be used to compute the velocity head. The constant head correction,  $h_c$ , was assumed to be zero because the scatter in the streamgaging data at the lower stages was so great that it was impossible to determine if  $h_c$  should have a nonzero value. Using a best fit value of  $c_d = 0.689$ , the rating curve for the W-3 weir, for the period prior to July 1963, can be expressed as:

$$Q = 14.75 \cdot (H + 0.024 \cdot H^{2.6})^{2.5}. \quad (3.6)$$

It should be expected that the discharge coefficient before July 1963 is higher than after that date because the original weir had less side contractions. Fig. 3.25 shows a plot of Eq. 3.6 and the streamgaging data obtained prior to July 1963.

### Consistency Checks

The consistency of the streamflow data was checked by means of comparisons between runoff values for the W-3 watershed and several U.S. Geological Survey streamflow measurement sites nearby. The long-term consistency was checked by means of a double mass plot of monthly runoff volumes. The runoff for the W-3 watershed was plotted against runoff data for the Passumpsic River at Passumpsic, Vermont, and the Moose River at St. Johnsbury, Vermont. Both the W-3 watershed and the Moose River drainage lie within the Passumpsic River basin. The use of the old rating curves for the W-3 weir resulted in large inconsistencies between the periods before and after July 1963, plus there was a clear indication that runoff volumes for W-3 were too high during months containing high discharges. The use of the new rating curves, as defined by Eqs. 3.5 and 3.6, resulted in the W-3 runoff data being completely consistent with the runoff data for the other streams.

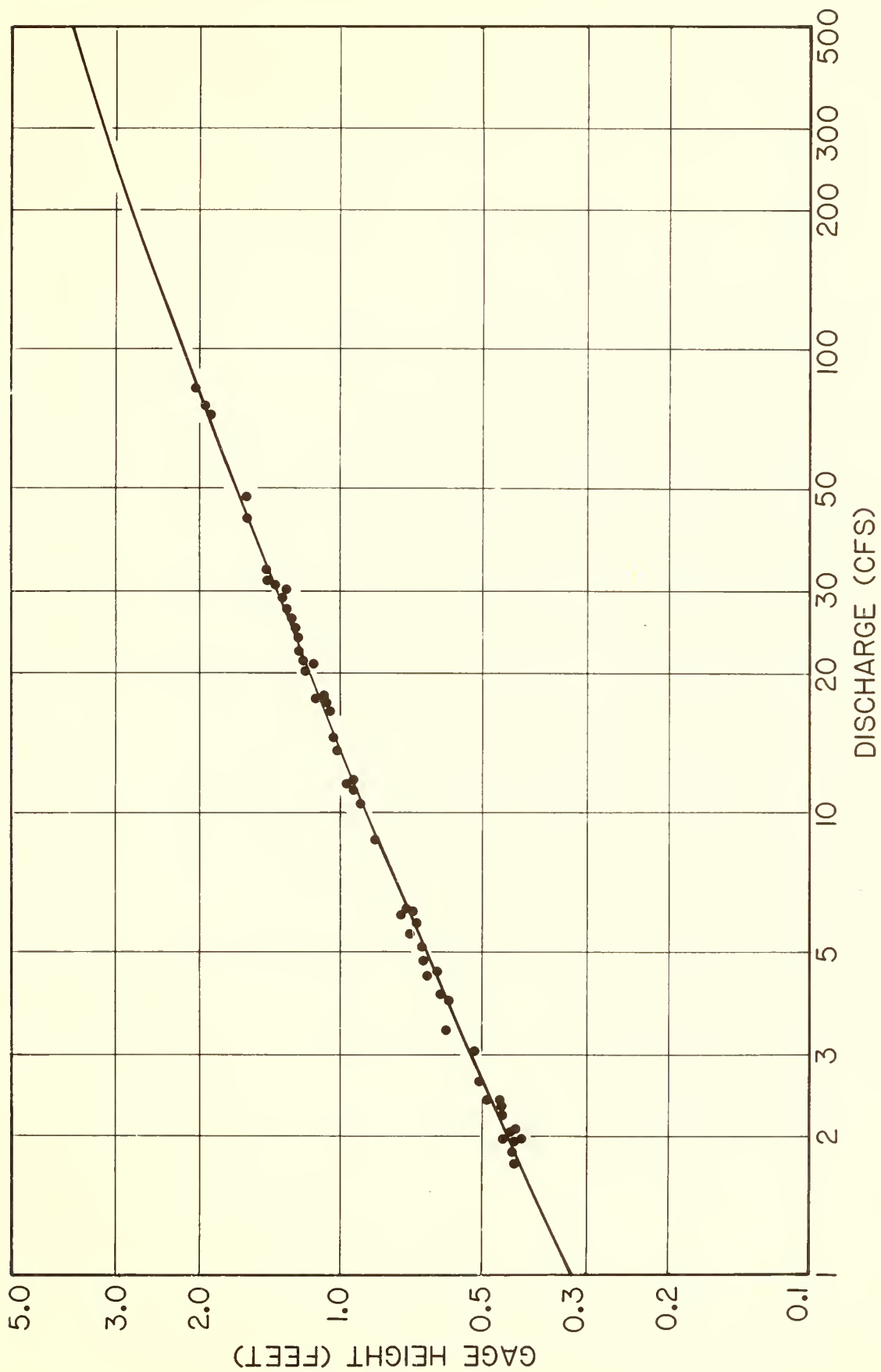


Figure 3.23. 1976 streamgaging measurements and W-3 weir rating curve for the period after July 1963.

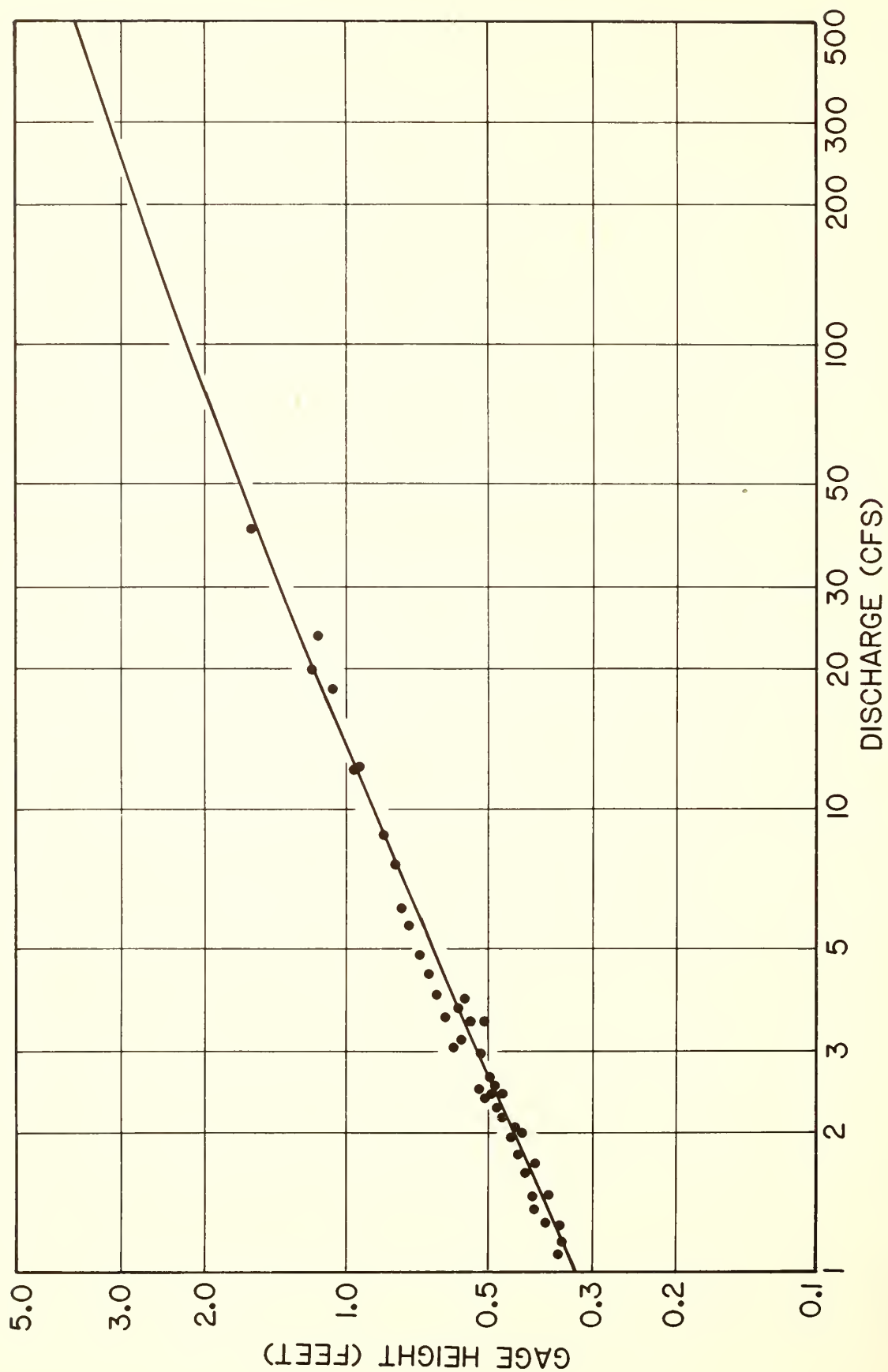


Figure 3.24. Streamgaging measurements taken from 7/63 through 1968 and W-3 weir rating curve for the period after July 1963.

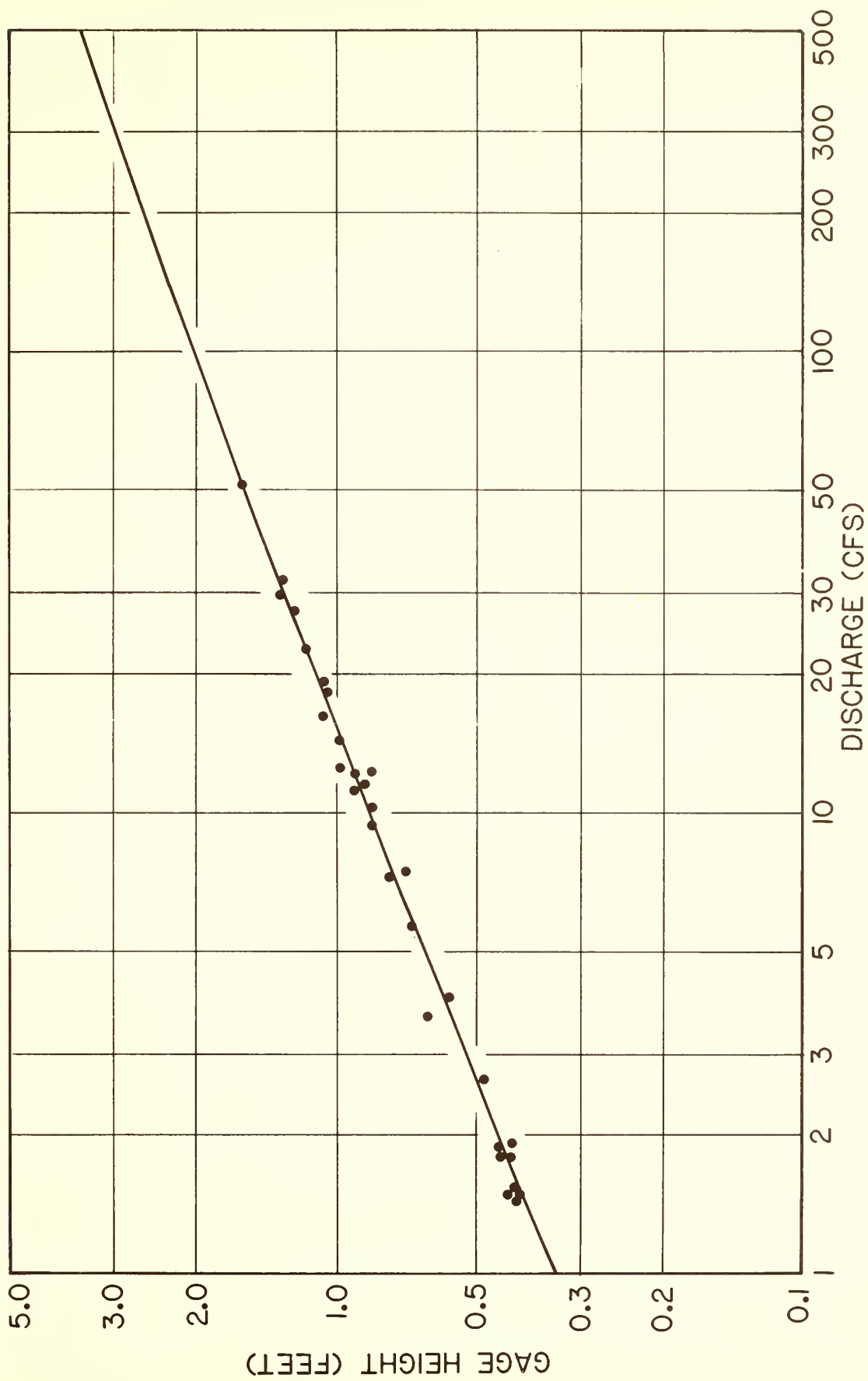


Figure 3.25. Streamgaging measurements taken from 1960 to 7/63 and W-3 weir rating curve for the period before July 1963.



The consistency of the flood of record (occurred in June 1973) was checked by comparing the total runoff for that event with the runoff for the Passumpsic River and the Moose River at Victory, Vermont. About 4 inches of runoff was measured at all 3 locations. Based on the available precipitation data this seems reasonable. The old rating curve for the W-3 weir indicated that the 5 inches of rain that fell on the W-3 watershed produced more than 5 inches of runoff.

These checks indicate that at least the vast majority of the streamflow data for the W-3 watershed are consistent. There is some evidence that low flow values may be too low prior to July 1963. There are 102 days with mean daily flows below 1.0 CFSD prior to July 1963 (lowest is 0.59 CFSD on several days during August and September 1960), and only 26 days afterward (lowest is 0.79 CFSD on 8/19/70). This may be real, but more likely is the result of not being able to determine the value of  $h_c$  from the available streamgaging measurements for that period. It probably can be safely said that the W-3 watershed streamflow data are more accurate for water years 1964 through 1974 than for the first 4 water years. Because of several other factors it is evident that the W-3 watershed data, in general, are better for water years 1964 through 1974 than for water years 1960 through 1963. These factors include:

1. more precipitation stations in the later years,
2. questionable precipitation data during the winters of 1960 and 1963,
3. air temperatures extrapolated from station R-12 from 10/59 to 11/60,
4. fewer snow course, evaporation, and soil moisture measurements in the early years, and
5. estimated stage data during the peak snowmelt runoff period in 1960 (April 12-19).

#### Available Streamflow Data

The continuous stage record for the W-3 weir for the entire period of record, January 1, 1960 through September 30, 1974 is included on the magnetic tape. The stage record is in breakpoint form, i.e., there is a time and gage height entry whenever there is a change in the slope of the continuous stage record. By using either Eq. 3.5 or 3.6, this stage record can be converted to instantaneous or mean discharges for any selected period.

Mean daily discharges are plotted and tabulated in Appendix A, in addition to being included on the magnetic tape. Table 3.9 gives monthly and annual runoff volumes in inches for the W-3 watershed. Instantaneous discharge, plus hourly mean areal precipitation, for selected events are plotted in Appendix B. The selection process for these events considered several factors. All of the largest runoff events are included (peak flow of record occurred on June 30, 1973). Events with heavy precipitation, which were not included in the previous category, were also selected. There is at least one event from each water year and from each month of the year. The events were selected to show watershed response to a single burst of rain (best example is June 28, 1972), complex rain storms (many examples), snowmelt periods, and rain-on-snow events (besides those during snowmelt periods, rain-on-snow events occurred in 2/61, 3/64, 2/70, 1/73, 3/73, and 2/74). Almost all of

Table 3.9

Monthly and annual runoff in inches for the W-3 watershed

| Water<br>Year | Oct. | Nov. | Dec. | Jan. | Feb. | March | April | May  | June | July | Aug. | Sept. | Annual |
|---------------|------|------|------|------|------|-------|-------|------|------|------|------|-------|--------|
| 1960          | 2.7E | 4.9E | 2.7E | 1.84 | 1.78 | 1.24  | 8.96  | 2.95 | 1.20 | 0.60 | 0.36 | 0.56  | 29.80  |
| 1961          | 1.03 | 1.31 | 0.97 | 0.71 | 1.04 | 1.55  | 5.73  | 3.82 | 2.90 | 1.53 | 0.70 | 0.47  | 21.75  |
| 1962          | 0.36 | 0.68 | 0.74 | 0.70 | 0.42 | 0.87  | 6.42  | 2.79 | 0.86 | 0.78 | 0.88 | 0.88  | 16.38  |
| 1963          | 3.25 | 2.75 | 1.39 | 0.80 | 0.54 | 0.99  | 7.82  | 4.27 | 1.08 | 0.68 | 0.73 | 0.41  | 24.72  |
| 1964          | 0.37 | 1.36 | 1.32 | 0.99 | 0.74 | 1.99  | 6.43  | 2.91 | 1.02 | 0.79 | 0.82 | 0.47  | 19.22  |
| 1965          | 0.69 | 1.13 | 1.41 | 1.10 | 0.97 | 1.49  | 3.44  | 1.66 | 1.38 | 0.74 | 1.15 | 1.55  | 16.71  |
| 1966          | 2.44 | 2.70 | 1.82 | 1.28 | 0.95 | 2.60  | 5.60  | 4.46 | 1.69 | 0.65 | 0.65 | 0.71  | 25.54  |
| 1967          | 0.71 | 0.99 | 1.18 | 0.83 | 0.63 | 0.79  | 5.31  | 5.11 | 2.00 | 1.17 | 0.81 | 0.70  | 20.25  |
| 1968          | 1.82 | 1.69 | 2.11 | 1.15 | 1.02 | 3.63  | 5.83  | 2.64 | 1.91 | 1.12 | 0.70 | 0.70  | 24.32  |
| 1969          | 0.89 | 1.38 | 1.51 | 1.17 | 0.93 | 1.14  | 10.14 | 7.44 | 2.05 | 1.65 | 1.61 | 0.76  | 30.66  |
| 1970          | 0.84 | 2.54 | 2.15 | 1.24 | 1.59 | 1.17  | 7.22  | 3.71 | 1.39 | 0.74 | 0.54 | 0.57  | 23.69  |
| 1971          | 0.65 | 0.76 | 0.80 | 0.67 | 0.72 | 0.92  | 5.23  | 8.06 | 1.26 | 0.66 | 1.81 | 0.94  | 22.48  |
| 1972          | 1.02 | 0.90 | 1.24 | 1.01 | 0.72 | 1.52  | 4.26  | 9.14 | 2.20 | 2.35 | 1.24 | 0.54  | 26.14  |
| 1973          | 0.95 | 1.81 | 1.73 | 2.14 | 1.70 | 4.22  | 6.54  | 4.16 | 5.18 | 3.30 | 1.18 | 1.50  | 34.42  |
| 1974          | 1.68 | 2.51 | 4.83 | 2.40 | 1.54 | 2.64  | 9.05  | 6.66 | 2.55 | 1.94 | 0.85 | 0.92  | 37.57  |
| AVG.          | 1.29 | 1.83 | 1.73 | 1.20 | 1.02 | 1.78  | 6.53  | 4.65 | 1.91 | 1.25 | 0.93 | 0.78  | 24.91  |

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Note: E indicates monthly runoff estimated from nearby USGS streamflow measurement sites.

the precipitation shown on these plots is rain. In only a few cases does snowfall occur during these major runoff periods.

### III.5 SNOW COURSE DATA

#### Available Data

Snow courses were originally established at stations R-1, R-3, and R-6. The snow courses at stations R-1 and R-6 were discontinued after the winter of 1968-69. New snow courses were established at stations R-25 (January 1967), R-1A (December 1969), and R-16 (November 1971). The site diagrams in section III.1 show where snow course measurements were made at each of the stations.

Originally snow course measurements were made with a Federal sampler. Each snow course consisted of 10 point measurements of depth and water-equivalent. Beginning with February 6, 1967, the use of the Federal snow tube was discontinued. All measurements since that date have been made with an Adirondack tube. Also in February 1967 the number of samples taken at each snow course was reduced from 10 to 5. Snow course measurements are made routinely on a weekly basis whenever there is significant snow on the ground over the watershed. During some years snow course data were collected more frequently during the snowmelt period.

The snow course data are tabulated in Appendix C. The tabulated values are the average depth and water-equivalent for each site. On some days water-equivalent measurements could not be obtained because the cores could not be retained when the tube was withdrawn from the snow cover. On these days only depth data are tabulated. Table 3.10 is a tabulation of the maximum water equivalent at each snow course for each water year.

#### Quality and Representativeness of the Data

The snow course data have been carefully collected by experienced observers. Thus, the measurements themselves are probably about as accurate as can be obtained with the equipment under the existing snow cover conditions. It has been reported that the Federal sampler tends to over-measure the water-equivalent by about 10 percent [Work, et al. (1965)]. The same authors also indicate that the Adirondack sampler is very accurate, though not practical for snow depths in excess of 5 feet. As can be seen from Table 3.10, snow depths seldom exceed 5 feet over the W-3 watershed.

From all indications the snow courses at stations R-1A, R-3, R-16, and R-25 are quite representative of other areas in the W-3 watershed with similar exposure and elevation. The station R-1 snow course was affected by boggy soil conditions, including water flowing under the snow cover during runoff periods. These wet soil conditions tend to reduce the snow cover. Thus, the R-1 snow course data are a low estimate of snow cover conditions at the higher elevations of the W-3 watershed. The R-1 snow course was moved to station R-1A in 1969. The R-1A site is quite representative of the higher elevations. As can be seen from Table 3.10, the maximum accumulation at R-1A is typically a couple of inches greater than at R-3, whereas the water-

Table 3.10. Maximum depth and water-equivalent at each snow course  
for water years 1960-1974 (values are in inches)

| Water year | Station<br>depth | R-1<br>W.E. | Station<br>depth | R-1A<br>W.E. | Station<br>depth | R-3<br>W.E. | Station<br>depth | R-6<br>W.E. | Station<br>depth | R-16<br>W.E. | Station<br>depth | R-25<br>W.E. |
|------------|------------------|-------------|------------------|--------------|------------------|-------------|------------------|-------------|------------------|--------------|------------------|--------------|
| 1960       | 36.2             | 11.3        |                  |              | 39.6             | 11.1        | 23.6             | 6.5         |                  |              |                  |              |
| 1961       | 24.3             | 6.4         |                  |              | 25.3             | 6.5         | 21.5             | 5.7         |                  |              |                  |              |
| 1962       | 36.8             | 9.5         |                  |              | 36.8             | 9.6         | 25.5             | 7.2         |                  |              |                  |              |
| 1963       | 48.6             | 15.7        |                  |              | 46.1             | 14.6        | 46.6             | 15.0        |                  |              |                  |              |
| 1964       | 29.1             | 9.9         |                  |              | 28.6             | 8.6         | 29.6             | 9.1         |                  |              |                  |              |
| 1965       | 23.5             | 5.8         |                  |              | 24.4             | 5.3         | 13.4             | 3.2         |                  |              |                  |              |
| 1966       | 36.0             | 10.8        |                  |              | 38.8             | 11.1        | 20.0             | 7.4         |                  |              |                  |              |
| 1967       | 20.5             | 5.6         |                  |              | 24.6             | 6.2         | 35.9             | 10.0        |                  |              | 22.2             | 5.7          |
| 1968       | 22.5             | 5.9         |                  |              | 28.2             | 8.4         | 49.3             | 15.6        |                  |              | 23.8             | 5.6          |
| 1969       | 50.0             | 15.1        |                  |              | 50.6             | 15.0        | 68.6             | 24.1        |                  |              | 38.2             | 10.1         |
| 1970       |                  |             | 47.4             | 13.1         | 38.5             | 11.8        |                  |             |                  |              | 21.8             | 6.4          |
| 1971       |                  |             | 58.4             | 16.6         | 53.2             | 14.2        |                  |             |                  |              | 44.4             | 10.7         |
| 1972       |                  |             | 48.6             | 14.6         | 41.9             | 12.6        |                  |             | 36.2             | 11.2         | 28.0             | 8.1          |
| 1973       |                  |             | 40.5             | 11.1         | 31.0             | 8.6         |                  |             | 28.9             | 8.8          | 22.5             | 7.0          |
| 1974       |                  |             | 40.2             | 11.3         | 30.8             | 9.2         |                  |             | 26.9             | 9.6          | 20.3             | 6.2          |

Note: Maximum depth and water-equivalent do not necessarily occur on the same day.



equivalent at R-1 was similar to that measured at the R-3 snow course.

The R-6 snow course was frequently affected by drifting snow. Table 3.10 shows that the snow course measurements at R-6 are considerably greater during some years than those at any other snow course even though R-6 is at a relatively low elevation. It is quite obvious that the majority of the snow course samples at R-6 during water years 1963, 1964, and especially 1967, 1968, and 1969 were made in a snow drift. The R-6 snow course was discontinued in 1969 because it was at a nonrepresentative location.

As has been indicated, most of the snow courses are representative of the snow accumulation and melt cycle in other areas of the W-3 watershed with similar elevation and exposure. Unfortunately, such areas constitute only a relatively small portion of the watershed. Most of the W-3 watershed is forested. In addition, many of the open areas are more exposed than the snow course sites. Measurements in recent years indicate that small forest clearings, which include most of the snow course sites, tend to accumulate the most snow. Maximum water-equivalent in the deciduous forests is typically slightly less than in the open. The water-equivalent in dense spruce stands is 20 to 50 percent less than in an adjacent forest clearing. In terms of ablation, the open areas typically are bare of snow first even though they accumulate more snow than either the deciduous or coniferous areas. The last snow to melt is that lying under dense spruce stands in the higher elevations of the watershed. Thus, the snow courses can not be directly used to determine average snow cover conditions over the W-3 watershed.

### III.6 PAN EVAPORATION DATA

#### Available Data

Pan evaporation data are available from two locations for the W-3 watershed. Data are available from station R-12 for 1963 through 1974 (except for 1972) and from the NOAA-ARS Snow Research Station for 1968 through 1973 (except for 1969). Pan evaporation measurements are begun each spring, usually sometime in May, and continued until freezing of the water in the pan stops data collection, generally in October.

A Class A pan is used to measure evaporation at station R-12. Fig. 3.10 is a photograph of station R-12 showing the evaporation pan. At the NOAA-ARS Snow Research Station an experimental, insulated X-3 pan is used to measure evaporation. The X-3 evaporimeter is made of white fiberglass and is approximately 2 feet in diameter and 2 feet deep. It is surrounded by a 5.5 inch thickness of freon-blown polyurethane on the upper 7 inches and a 3 inch thickness on the lower portion and bottom. The larger thickness of insulation on the upper portion is used to accommodate an offset stilling well. It is painted black on the inside below the water line to minimize reflected radiation. The pan is installed on a platform so that the rim is one meter above ground level. The X-3 pan installation at the snow research station is visible in Fig. 4.2.

The pan evaporation data are tabulated in Appendix D. Data are tabulated for May through October of each year. Negative values, which occasionally

occur and are generally the result of measurement errors, are tabulated as zero. Table 3.11 summarizes the pan evaporation data by tabulating the average daily pan evaporation by month and for each station. Table 3.11 also contains the total May through October pan evaporation at each station for each year.

#### Quality and Representativeness of the Data

The pan evaporation data, in general, have been carefully collected by experienced observers from properly installed pans. Thus, the measurements themselves must be considered to be reliable on most days. On days of heavy rain, the evaporation observations may be considerably in error resulting from splash-out due to rain and possibly high wind.

There is a quite consistent relationship between evaporation values from the X-3 and Class A pans during months when both were in operation (see Table 3.11). The only real exception is during July 1971. During this month the average evaporation is less for the Class A than for the X-3 pan. This is opposite from all other months. This discrepancy is the result of significant differences in accumulated evaporation on the 6th and 19th of July. Based on meteorological data, the X-3 data seem correct. Field notes indicate that there was some problem with the Class A observation on the 6th. However, it is not possible to absolutely determine which set of measurements are in error during July 1971. There is also no easy way to check the consistency of the pan evaporation data during months when only one pan was in operation.

The annual pan coefficient (ratio of pan evaporation to lake evaporation) for a Class A pan varies from 0.6 to 0.8, depending on location. An analysis of evaporation data for the United States [Kohler, et al. (1959)] indicates that the Class A pan coefficient for New England is typically in the range of 0.75 to 0.80; the actual coefficient is dependent on the exposure at the particular site. A primary objective in the design of the X-3 pan was to develop an evaporimeter which would have a more nearly constant pan-to-lake coefficient. The current best estimate of the X-3 pan coefficient is 0.73.

The analysis of evaporation data [Kohler, et al. (1959)] also indicates that for northern Vermont approximately 80 percent of the annual evaporation occurs between May and October and that the annual lake evaporation is about 23 to 26 inches. Evidence suggests that annual lake evaporation and annual potential evapotranspiration are approximately equal.

An estimate of the actual annual evapotranspiration for the W-3 watershed can be determined from the long-term water balance. The mean annual precipitation computed from gage measurements (from Table 3.5) is 42.8 inches. The actual mean areal precipitation is more likely in the range of 43.5 to 45 inches, considering the probable precipitation gage catch deficiency of 10 to 15 percent during snowfall. The mean annual runoff (from Table 3.9) is 24.9 inches. Thus, the actual annual evapotranspiration for the W-3 watershed is probably somewhere between 18.5 and 20 inches. This estimate of actual evapotranspiration also holds for the years that the Class A pan was in operation and for the period of record of the X-3 pan.

Table 3.11. Summary of pan evaporation data  
(all values are in inches)

a. Station R-12, Class A pan

| Year | Daily average pan evaporation |      |      |      |       |      | May-Oct.<br>Total |
|------|-------------------------------|------|------|------|-------|------|-------------------|
|      | May                           | June | July | Aug. | Sept. | Oct. |                   |
| 1963 | .175                          | .203 | .225 | .145 | .126  | .100 | 29.9              |
| 1964 | .172                          | .224 | .199 | .165 | .127  | -    | 29.5E             |
| 1965 | .216                          | .227 | .205 | .177 | .102  | .052 | 30.0              |
| 1966 | .149                          | .196 | .220 | .177 | .106  | .115 | 29.6              |
| 1967 | .160                          | .204 | .162 | .139 | .111  | .096 | 26.7              |
| 1968 | .153                          | .111 | .216 | .167 | .111  | .061 | 25.2              |
| 1969 | .141                          | .158 | .172 | .137 | .091  | .083 | 24.0              |
| 1970 | .164                          | .202 | .194 | .199 | .096  | .051 | 27.8              |
| 1971 | .157                          | .235 | .173 | .178 | .108  | .058 | 27.8              |
| 1973 | .099                          | .172 | .196 | .181 | .106  | .082 | 25.6              |
| 1974 | .119                          | .191 | .216 | .169 | .099  | .063 | 26.3              |
| AVG. | .155                          | .193 | .198 | .167 | .108  | .076 | 27.5              |

b. NOAA-ARS Snow Research Station, X-3 pan

| Year | Daily average pan evaporation |      |      |      |       |      | May-Oct.<br>Total |
|------|-------------------------------|------|------|------|-------|------|-------------------|
|      | May                           | June | July | Aug. | Sept. | Oct. |                   |
| 1968 | .147                          | .096 | .189 | .147 | -     | -    | 22.1E             |
| 1970 | .162                          | .190 | .173 | .175 | .083  | .044 | 25.3              |
| 1971 | -                             | .198 | .198 | .156 | .080  | .052 | 25.5E             |
| 1972 | -                             | -    | .137 | .138 | .102  | .080 | 23.8E             |
| 1973 | .080                          | .164 | .187 | .154 | .087  | .063 | 22.5              |
| AVG. | .130                          | .162 | .177 | .154 | .088  | .060 | 23.8              |

Note: - indicates missing data

E indicates estimated value (Estimated Class A pan total uses the long-term average for the missing month. Estimated X-3 totals are based on ratio of X-3 to Class A.)

It is not known which of the evaporation pans provides a better index to watershed evapotranspiration. Table 3.11 shows that there is a difference in the measured evaporation between the two stations. The difference is partly caused by the variation in elevation between the two stations, but probably to a greater extent the difference is due to variations in the exposure and pan coefficients.

### III.7 SOIL-MOISTURE DATA

#### Available Data

Soil-moisture measurements were taken at stations R-1, R-3, and R-6 from 1963 until 1969 (R-6 discontinued in 1967). The measurements were made with a Nuclear-Chicago neutron scattering probe. The probe was inserted in an access tube and measurements made at various depths down to 48 inches. Readings were scheduled on a weekly basis at times when weather and soil conditions permitted such sampling.

Plots of soil-moisture-by-volume for stations R-1, R-3, and R-6 are contained in Appendix E. These plots show soil-moisture values at depths of 6, 12, 24 and 36 inches.

#### Quality of the Data

All soil-moisture measurements were taken carefully and the instrument calibration was checked on a regular basis. However, the following cautionary information concerning these measurements should be noted.

1. The absolute moisture-by-volume readings for any one date have not been consistently checked or ascertained with spot gravimetric samples (to avoid disturbance or destruction of the sampling sites). However, the relative differences between readings can be considered reliable.
2. At certain times of the year the lower depths, below 30 inches, are probably saturated. This is because of the shallow nature of the watershed soils and the excessive amounts of soil-moisture contributed by infiltrating snowmelt water.
3. The original profile of station R-3 was disturbed when the station was established. Thus, it is possible that the 6 inch depth does not represent the true surface conditions.
4. The surface readings at all 3 stations are subject to inaccuracies due to the organic, well-aerated nature of the coarse-textured surface soils.

While these data should be indicative of changes in soil-moisture over portions of the W-3 watershed, these sites are certainly not truly representative of conditions over the entire watershed.



## CHAPTER IV: NOAA-ARS SNOW RESEARCH STATION

### INTRODUCTION

The NOAA-ARS Snow Research Station was established in 1967 as part of a cooperative snow hydrology project [Johnson and Anderson (1968)]. The purpose of this project is to study the physical processes which control snow metamorphosis and snowmelt. Only a limited amount of data were collected during the 1967-68 winter. Continuous measurements of the variables needed to use and evaluate conceptual snow cover models began in December 1968 and have continued to the present time. Measurements of some of the variables, precipitation and those needed to estimate potential evapotranspiration, are recorded throughout the year (only precipitation was measured during the summer of 1969). This chapter describes the snow research station and the data collected up to September 1974. These data were used to test a point energy and mass balance model of a snow cover [Anderson (1976)]. The report describing this model includes some additional information on the snow research station.

### DESCRIPTION OF THE SITE

The NOAA-ARS Snow Research Station is located about 5 miles NNW of Danville, Vermont, at an elevation of 1812 feet (see Fig. 2.1). Fig. 4.1 is a diagram of the snow research station site. The central portion of the site was graded prior to the installation of the instruments. Thus the site is very flat with a slight slope to the south. This results in a very uniform snow cover over the immediate site area. However, during windy periods there is a tendency for new snow to blow off this area. Based on mass balance computations, the amount of snow which blows off the site typically exceeds the catch deficiency of the precipitation gage.

The research station is located near the eastern edge of a 15 acre clearing (see Fig. 2.2). To the west, the forest is about 600 feet from the center of the site area. The first 250 feet are generally free of vegetation which protrudes above the snow cover. Beyond 250 feet there are scattered clumps of small conifers. It is about 200 feet from the center of the site to the forest in both a northeasterly and southeasterly direction. This area is free of any vegetation which protrudes above the snow. The prevailing winds in the winter are from a westerly direction.

Figs. 4.2 through 4.7 are photographs of the NOAA-ARS Snow Research Station. All but one of the photographs were taken in December 1976 and January 1977. The physical layout and surroundings have changed only slightly since the station was established.

### DATA COLLECTION AND PROCESSING

#### Background

The NOAA-ARS Snow Research Station is manned on an 8 hours per day, 5 days per week basis by a meteorological technician. Commercial power lines were

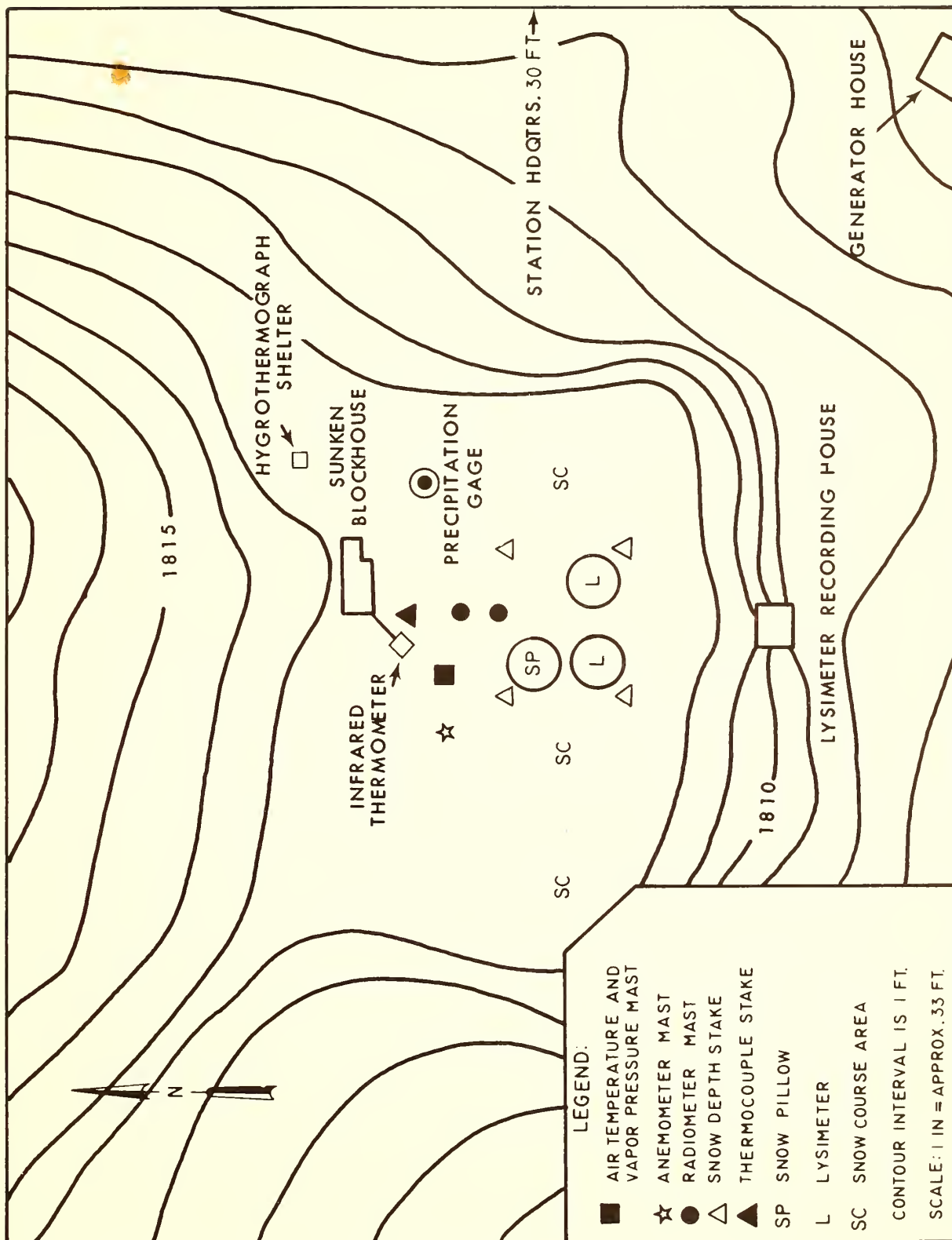


Figure 4.1. Site diagram of the NOAA-ARS Snow Research Station.



Figure 4.2. Overview of the NOAA-ARS Snow Research Station looking SSE. Photograph taken in October 1972 (X-3 evaporation pan is located just to the right of the blockhouse).



Figure 4.3. Lysimeter heat rings suspended above the snow (Station R-3 can be seen in the background).



Figure 4.4. Snow research station from the west.



Figure 4.5. Radiometer masts looking west (large suspended box in the background contains natural gamma radiation snow gage [Bissell and Peck (1974)]).





Figure 4.6. Infrared thermometer housing, snow cover temperature stake, air temperature and dew-point mast, and anemometer masts from the roof of the blockhouse (natural gamma radiation snow gage and snow course areas are in the background).



Figure 4.7. Precipitation gages and cotton region shelters (precipitation gage test site X-4 [Larson (1972)] is in the background).

extended when the station was established; thus, AC power is available. The station can be reached by road, except during the winter when a snowmobile is used.

A basic philosophy of the data collection program has always been to make at least two measurements of each variable whenever feasible. In many cases a variable is measured with more than one type of sensor. This provides both a check on the accuracy of the data and a backup observation in case one of the sensors or recorders fails.

### Data Processing

The steps that are followed in the processing of the snow research station data are as follows:

1. Data are recorded and manually transferred to forms at the snow research station each month. Most data are recorded in digital form, but some data are picked off strip charts. The forms are sent to the Office of Hydrology, NOAA.
2. The data forms are reviewed, integrator slopes and intercepts are computed, and most of the data are put on punched cards.
3. All data that are punched on an hourly basis are loaded onto a magnetic tape to reduce card input to further data processing programs.
4. The data are run through the basic data reduction program which converts all data into the proper units, calculates means, and computes implicitly measured variables, such as albedo and net radiation. The output is checked for consistency, mistakes in punching, and other errors.
5. When the data are in satisfactory form, the final run of the data reduction program is made. On this run the best measurement of each variable is written onto a master magnetic tape. Estimates of missing data are made from secondary sensors when so indicated. These estimates are based on the relationship between the primary and secondary sensors on those days when both have valid data. These estimates are classified as good.
6. The contents of the master tape are printed and checked. Values of certain variables (those primarily used as model input) still missing after step 5 are estimated by hand. In some cases the estimates are based on other sensors at the snow research station which have not been put on punched cards. Or the missing period may have only lasted for a few hours, thus, the estimate can be based on the hours before and after the missing period. Such estimates are classified as fair. In a few instances certain variables are missing for long periods and can not be estimated from any other measurements at the snow research station. These periods primarily occur during summer months. The two variables affected are wind speed and incoming solar radiation. Estimates during these extended periods are based on relationships between measurements at the snow research station and the FAA airport at Montpelier, Vermont (30 miles SW). Relationships between wind travel at both sites and between daily solar radiation at the snow research station

and daytime cloud cover at Montpelier are used. These estimates are classified as poor.

#### Summary of Collected Data

Table 4.1 summarizes the data collected at the NOAA-ARS Snow Research Station for the period December 1968 through September 1974. The estimated standard error between the measured and "true" value of each variable is based on a subjective evaluation of several objective factors. For the instruments these factors include comparisons between different or similar sensors measuring the same variable, calibrations of sensors against working or primary standards, repeatability of measurements, manufacturer's specifications, and a knowledge of the design and measuring principle of the instruments. The instrumental error is the combined error of the sensor and the recording system. Besides instrumental errors, the standard error estimates given in Table 4.1 include the effect of sampling errors. Sampling errors for the meteorological variables and snow cover variables, such as snow surface temperature and snow cover outflow whose values are basically determined by meteorological conditions, should be relatively small most of the time because of the uniformity and small size of the site area. The snow cover is also quite uniform over the site area. However, its variability is large enough so that sampling errors are of the same order of magnitude as instrumental errors. The estimated sampling errors for snow cover depth, density, and water-equivalent are based on the variability between individual snow course points.

#### Further Comments on Selected Variables

In addition to the information about the data contained in Table 4.1, some further comments are warranted in regard to a few of the variables.

1. Incoming (atmospheric) longwave radiation ( $Q_a$ ). Net radiation can be measured at a particular point for use in energy balance computations. At the NOAA-ARS Snow Research Station net radiation is not measured. This is because net radiation is highly dependent on the surface over which it is measured. Therefore, although net radiation data could be used in energy balance computations at the snow research station, its use in areal applications would be severely limited. In areal applications it is more useful to measure the components of net radiation. For areal studies the incident components of net radiation, incoming solar and longwave radiation, can be extrapolated from one point to another by taking topography and vegetation cover into account. The outgoing components are a function of the albedo and temperature of the surface, both of which can be highly variable over an area.

Incoming longwave radiation has been one of the most difficult of the variables to measure accurately. The ventilated radiometers are affected by wind, especially if the wind is perpendicular to, or in the opposite direction of, the forced ventilation. In addition, ventilated radiometers record much too low during rain due to evaporation from the upper surface of the thermopile plate.

Table 4.1--Summary of data collected at the NOAA-ARS Snow Research Station from  
December 1968 through September 1974.

| Variable           | Sensor                                                                                                            | Recorder                                      | Accuracy-estimated<br>standard error                                                      |
|--------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------|
| 1. Air temperature | a. bimetallic strip thermo-<br>graph (12/68-4/69); 6 feet<br>above ground in cotton<br>region shelter             | drum chart                                    | 2°F                                                                                       |
|                    | b. platinum resistance element<br>in ventilated radiation<br>shield (11/69-9/74); one<br>meter above snow surface | strip chart                                   | 1°F                                                                                       |
| 2. Vapor pressure  | a. human hair hygrograph<br>(12/68-4/69); 6 feet above<br>ground in cotton region<br>shelter                      | drum chart (recorded<br>as relative humidity) | less than 5% above<br>32°F, and greater<br>than 10% below 0°F.                            |
|                    | b. lithium chloride dewcell<br>in ventilated radiation<br>shield (11/69-9/74); one<br>meter above snow surface    | strip chart (recorded<br>as dew point)        |                                                                                           |
| 3. Wind speed      | low threshold (0.7 mi mph)<br>3-cup anemometers.                                                                  | Digital printout to<br>nearest 0.1 mph        | 2% or 0.2 mph,<br>whichever is greater<br>(this error may be<br>exceeded below<br>1 mph). |
|                    | a. (12/68-4/69) 0.5 meters<br>above snow surface (data<br>adjusted to one meter<br>for publication.)              |                                               |                                                                                           |
|                    | b. (11/69-9/74) 1.0 meter<br>above snow surface                                                                   |                                               |                                                                                           |



Table 4.1, cont'd.

| Variable                                     | Sensor                                                                                                 | Recorder                        | Accuracy-estimated<br>standard error |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------------------|
| 4. Incident solar radiation                  | a. 50-jct., temperature compensated, black and white concentric ring, bulb pyranometer (12/68-5/70)    | electronic volt-time integrator | 3%                                   |
|                                              | b. Eppley Laboratories, Model 2 temperature compensated precision pyranometer (6/70-9/74)              | electronic volt-time integrator | 2%                                   |
| 5. Reflected solar radiation                 | a. 50-jct., temperature compensated, black and white concentric ring, bulb pyranometer (12/68-2/73)    | electronic volt-time integrator | 3%                                   |
|                                              | b. Eppley Laboratories, Model 2 temperature compensated precision pyranometer (3/73-4/74)              | electronic volt-time integrator | 2%                                   |
| 6. Incoming (atmospheric) longwave radiation | a. ventilated Gier and Dunkle type total hemispherical radiometer (12/68-9/71, plus 4/72-2/73)         | electronic volt-time integrator | 10%                                  |
|                                              | b. pyrgeometer (hemispherical infrared radiometer) with a KRS-5 dome, (10/71-3/72, plus 3/73 and 4/73) | electronic volt-time integrator | 6%                                   |

Table 4.1, cont'd.

| Variable                       | Sensor                                                                                                                                                     | Recorder                                           | Accuracy-estimated standard error                                                                   |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 7. Precipitation               | shielded universal gage, 6 feet above ground                                                                                                               | drum chart                                         | mean catch deficiency for snow is about 15%. Based on comparison with nearby gages [Larson (1972)]. |
| 8. Soil temperature            | thermocouples at 3, 6, 12, 24, and 36 inches below surface.                                                                                                | strip chart (instantaneous value every 12 minutes) | 0.4°F                                                                                               |
| 9. Snow cover water-equivalent | a. snow course consisting of six sampling points. Adirondack snow tube is used.<br>b. 12 feet diameter snow pillow flush with ground surface, (12/68-4/74) | spring scale<br><br>fluid level recorder           | 0.3 in or 3%, whichever is greater<br><br>0.5 in or 4%, whichever is greater                        |
| 10. Snow cover depth           | snow courses and snow stakes                                                                                                                               | visual                                             | Accuracy of snow course and snow pillow measurements varies with snow cover conditions.<br>0.5 in   |
| 11. Snow cover density         | snow courses with Adirondack snow tube (water-equivalent/depth)                                                                                            |                                                    | 0.015 gm·cm <sup>-3</sup>                                                                           |
| 12. Snow surface density       | 500 cm <sup>3</sup> CRREL tubes inserted horizontally as near to the surface as possible.                                                                  | beam balance                                       | 0.02 gm·cm <sup>-3</sup>                                                                            |

Table 4.1, cont'd.

| Variable                     | Sensor                                                                                                                       | Recorder                                                                                                                      | Accuracy-estimated<br>standard error                                                                                                          |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 13. Snow cover temperature   | thermocouples attached to wooden stake                                                                                       | strip chart (instantaneous value every 12 minutes)                                                                            | 0.5°F                                                                                                                                         |
| 14. Snow surface temperature | a. thermocouple maintained at or near snow surface<br><br>b. Barnes Engineering, Model IT-3 infrared thermometer (4/70-4/74) | strip chart (instantaneous value every 12 minutes)<br><br>strip chart (4/70-4/73) electronic volt-time integrator (1/74-4/74) | unreliable except at night when the thermocouple is known to be at the snow surface.<br>2°F at 32°F,<br>4°F at 10°F, and<br>>5°F below -10°F. |
| 15. Snow cover outflow       | pair of 10 foot diameter lysimeters                                                                                          | tipping bucket recorded on digital counter                                                                                    | within 10% or 0.05 in, whichever is larger, on a daily basis                                                                                  |

The pyrgeometer seems to give good results when its dome is in a like-new condition and the amount of shortwave radiation is low. However, when the dome oxidizes and when clear skies occur, the pyrgeometer seems to record too high. This is caused by shortwave radiation being absorbed by, and thus heating, the dome.

In addition to the measured values,  $Q_a$  is computed from air temperature, vapor pressure, and the ratio of incoming solar radiation to clear sky solar radiation by the method suggested by Anderson and Baker (1967). This method has been shown to give relatively unbiased estimates of  $Q_a$  on a long-term basis. The clear sky solar radiation curve for the snow research station is shown in Fig. 4.8. In addition to clear sky solar radiation, the  $Q_a$  estimation procedure requires the long-term relationship between upper-air and ground level temperatures. This relationship was determined by using 850 mb level upper-air temperature charts and measured surface temperatures. The relationship can be expressed as:

$$T_{\mu} = 1.4 + 0.83 \cdot T_a, \quad (4.1)$$

where:  $T_{\mu}$  = mean daily 850 mb level temperature ( $^{\circ}\text{F}$ ) and

$T_a$  = mean daily surface temperature ( $^{\circ}\text{F}$ ).

The mean station pressure for the snow research station is 950 mb.

Comparisons were made between  $Q_a$  values obtained from the ventilated radiometer and the estimation procedure with those obtained from the pyrgeometer. This was done when the pyrgeometer was new and the magnitude of shortwave radiation was low. The standard errors for the ventilated radiometer and the estimation procedure were nearly identical.

Based on these factors, it is concluded that the estimation procedure provides unbiased estimates of  $Q_a$  with no more variability about the "true" value than the  $Q_a$  values measured by either the ventilated total hemispherical radiometer or the pyrgeometer.  $Q_a$  values from both of these instruments are biased estimates of  $Q_a$  under certain meteorological conditions. The effect of these biased values on snow cover energy balance computations is demonstrated by Anderson (1976).

2. Snow cover water-equivalent. Water-equivalent measurements are made with snow tubes and snow pillows. The snow course data obtained with an Adirondack tube are definitely the most reliable. Over-measurement of water-equivalent with an Adirondack tube is not a problem as it is with the Federal sampler [Work, et al (1965)]. There is a problem with the Adirondack tube in that it does not retain the snow core when withdrawn from a dry, low density snow cover. For this reason good snow course samples frequently cannot be obtained during the early stages of the accumulation season at the snow research station. If good cores can not be obtained on a given day, snow course measurements are not recorded. There is also some difficulty in obtaining good cores when thick ice layers are present, especially when the ice layer is at the snow-soil interface. A thick ice layer



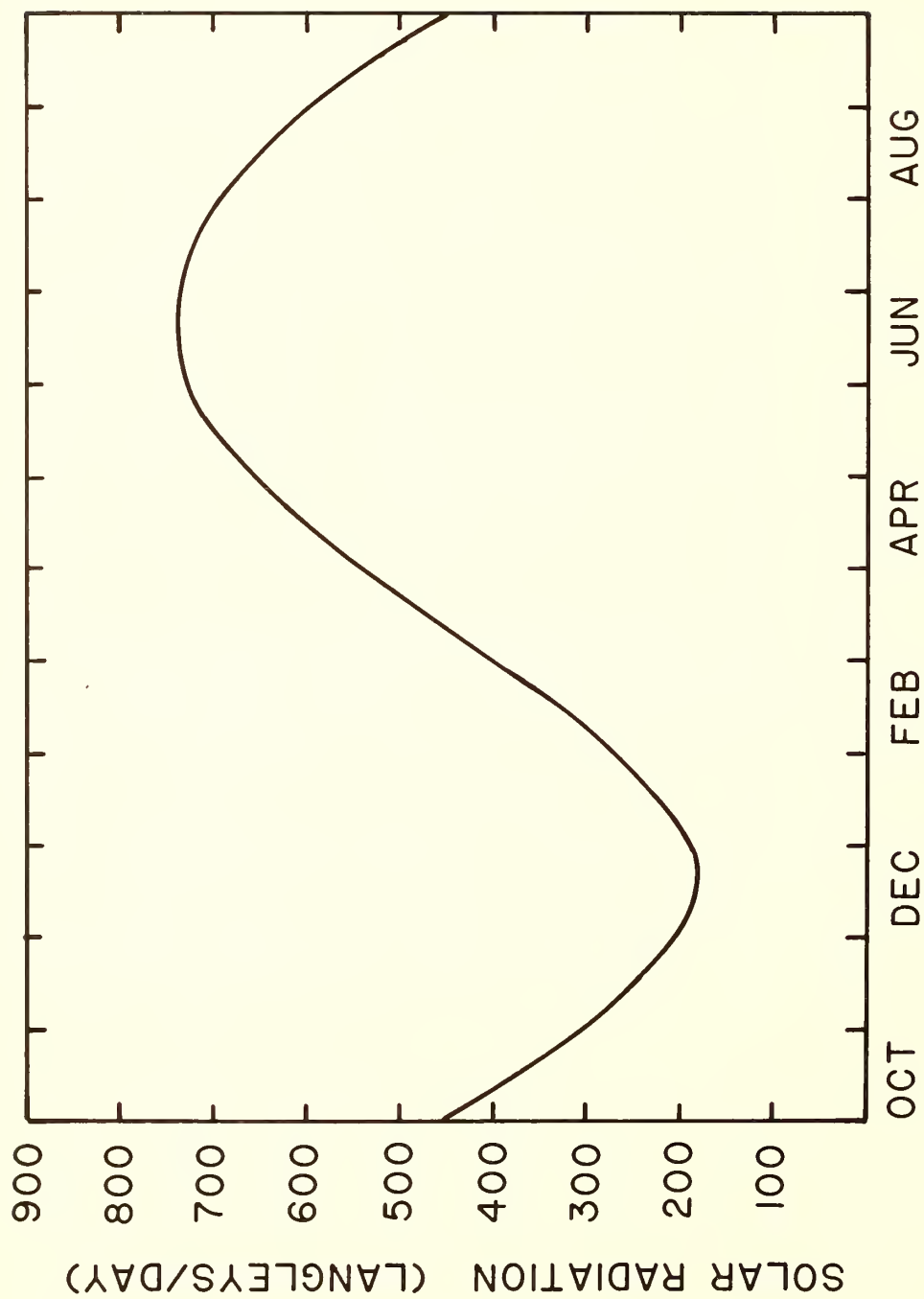


Figure 4.8. Clear sky incoming solar radiation curve for the NOAA-ARS Snow Research Station.

was present at the base of the snow cover during much of the 1974 winter.

The snow pillows provide good estimates of water-equivalent when the snow cover is relatively free of ice layers. Unfortunately ice layers occur quite frequently at the snow research station. During the winters of 1968-69 and 1970-71 the snow cover was relatively free of ice. Thick ice layers caused erratic snow pillow readings during most of the 1969-70 and 1973-74 winters. A mechanical problem caused abnormal fluctuations during the winter of 1971-72. The line connecting the pillow to the water-level recorder became plugged in late January 1973; thus snow pillow data were lost for the remainder of that winter. In addition, the snow pillow readings have never returned to zero after melt (readings started at zero in the fall). The exact cause of this problem is not known. The discrepancy seems to occur during the melt season since snow pillow and snow course values of water-equivalent are reasonably close just prior to the snowmelt period. A good rule to follow is; if the snow pillow data compares reasonably well with the snow course measurements they can be considered reliable.

3. Snow cover outflow. Several snow pillows were in operation during the winters of 1969 through 1972. Comparisons were made between the daily change in water-equivalent as measured by different pillows to determine if the pillows could be used along with precipitation measurements to reliably estimate snow cover outflow. The standard error computed during these comparisons ranged from 30 to 50 percent of the average daily change in water-equivalent. Therefore, it was concluded that snow pillows could not be used to provide a reasonable estimate of snow cover outflow for time intervals up to at least one day.

In the fall of 1972, two 10 foot diameter lysimeters were built in order to obtain accurate measurements of snow cover outflow. These lysimeters are built of plywood with a drain in the middle. The snow cover outflow runs out the drain and through a 1.5 inch PVC pipe, at a 5 percent slope, to a shelter located about 40 feet south of the lysimeters. There the outflow from each lysimeter is measured by a specially constructed tipping bucket gage. Each tip is equivalent to about 0.001 inch of snow cover outflow over the lysimeter area. The exact calibration factor for each tipping bucket assembly is checked twice a year. A circular pipe containing a heat cord (rating is about 40 watts per foot) is suspended over each lysimeter (see Fig. 4.3). The pipe coincides with the perimeter of the lysimeter. Prior to melt or rain-on-snow periods this heat ring is activated and a 0.7 inch wide slot is melted around the lysimeter. This slot separates the snow above the lysimeter from the surrounding snow cover. This assures that the contributing area is known.

Mechanical problems hindered data acquisition during the first part of the 1972-73 winter. Beginning on March 8th, reliable snow cover outflow measurements were obtained for most of the remainder of the snow season. The measurements are considered reliable when hourly and daily outflows from both lysimeters are in close agreement and the snow cover water balance for the melt period is near zero. In 1974,

a thick ice layer formed in mid-winter at the base of the snow cover. Such an ice layer is unusual at the snow research station. When snowmelt began in March, melt-water from over a large area moved horizontally across this ice layer, over a metal lip, and into the lysimeters. As much as 17 inches of water per day passed through the lysimeters in early April (maximum water-equivalent during 1974 was only about 8 inches). Thus, the 1974 lysimeter data are ignored.

4. Snow surface temperature. During the first winter, 1968-69, snow surface temperature measurements were attempted by placing a thermocouple at the snow surface. This was unsuccessful because frequent snowfalls made it difficult to maintain the thermocouple at the surface and the thermocouple readings were affected by solar radiation during daylight hours. In subsequent years an infrared thermometer, placed in a heated box and suspended over the snow, was used to measure snow surface temperature. Up until 1974 the infrared thermometer was recorded on a strip chart recorder which had a lower limit of  $-10^{\circ}\text{F}$ . Thermocouple readings were maintained during this period and are tabulated during nighttime hours when either the snow surface temperature went below  $-10^{\circ}\text{F}$  or the infrared thermometer was inoperative. However, these thermocouple data are still difficult to use because of the uncertainty as to whether the thermocouple was located at the snow surface. Beginning in January 1974, the infrared thermometer was connected to an electronic volt-time integrator, thus eliminating the  $-10^{\circ}\text{F}$  lower limit.

The infrared thermometer was periodically calibrated with a black-body cavity in a cold room. The temperature range of the calibrations was  $-30^{\circ}\text{F}$  to  $32^{\circ}\text{F}$ . Infrared thermometer readings are also routinely compared to thermocouple measurements of snow surface temperature on nights when the thermocouple is known to have been located at the snow surface.

In addition to the accuracy of the sensors, the accuracy of the recording systems is also of importance in making hydro-meteorological measurements. Early in the operation of the snow research station it was discovered that the electronic volt-time integrators were not completely stable over time. Thus, a system was devised which would input a null voltage to the integrators during one hour each night and a selected voltage during another hour. The magnitude of the selected voltage is altered throughout each month. From this information the intercept and slope of the current relationship between sensor output and integrator output can be computed. If sudden changes occur (these happen infrequently), they can also be detected.

#### AVAILABLE DATA

Most of the data collected at the NOAA-ARS Snow Research Station are included in this publication or on the associated magnetic tape. The two exceptions are soil and snow cover temperatures. These data are not reduced on a routine basis. Only selected periods have been hand tabulated for use in snow cover energy balance studies. In addition, snow cover water-equivalent and depth data are presented in an abbreviated form. Average

values, not the individual point measurements, are given for the snow courses and the depth stakes. Snow pillow readings are only given once a day, at midnight.

Appendix F contains a daily summary of the data collected at the snow research station for each month that the station was in operation. Estimated data are not identified in this summary. However, estimated values account for only 1 or 2 percent of the total data record. Missing values of the snow cover variables (depth, density, water-equivalent, surface temperature, and snow cover outflow) are never estimated. In addition to the measured quantities, Appendix F lists the daily total estimated incoming longwave radiation as computed by the method suggested by Anderson and Baker (1967).

The magnetic tape (see chapter V for the format) contains the information on the snow research station master tape. This consists of daily values of snow cover depth, density, and water-equivalent (same as listed in Appendix F), plus hourly values of the other variables. Hourly values are included on the magnetic tape for:

1. air temperature (one meter height),
2. dew point (one meter height),
3. wind speed (one meter height),
4. incoming solar radiation,
5. reflected solar radiation (winter only),
6. measured incoming longwave radiation,
7. snow surface temperature,
8. snow cover outflow, and
9. precipitation.

Estimated hourly values are labeled as to the quality of the estimate; good, fair, or poor. Thermocouple measurements of snow surface temperature are distinguished from infrared thermometer measurements.

Most users of the magnetic tape data will probably want to convert dew point values to vapor pressure. A simple, yet very accurate equation for performing this conversion can be expressed as:

$$e_a = 8.117 \cdot 10^6 \cdot \exp [-7701/(T_d + 405)] , \quad (4.2)$$

where:  $e_a$  = vapor pressure of the air (in. H<sub>g</sub>), and

$T_d$  = dew point (°F).

Eq. 4.2 compares closely with saturation vapor pressure values given in the Smithsonian Tables (1968) over a temperature range of at least -60°F to 120°F.

#### SUMMARY

The cold temperatures, icing of the instruments, and other climatic factors make continuous data collection over a snow cover an especially difficult task. However, with capable, dedicated personnel at the site nearly every day and with the availability of AC power, a high quality set of data can be



obtained. The quality of the data collected at the NOAA-ARS Snow Research Station is probably at least as good as any continuous set of snow cover data yet collected.

Much of the data at the snow research station is representative of conditions over the adjacent W-3 watershed. Air temperature and dew point measurements at the snow research station should be reasonable estimates of the average temperature and vapor pressure over the W-3 watershed. The incoming solar and longwave radiation data should be nearly the same as the incident radiation values above tree level over the watershed. To determine the amount of radiation reaching the snow cover, the vegetation and topography must be taken into account.

The mean wind speed over the watershed is undoubtedly different from that measured at the snow research station. The relationship between the two quantities will be investigated over the next couple of years. Point snow albedo measurements are seldom representative of areal albedo in regions with diverse topographic and vegetal conditions. Measurements in 1969 over W-3 and an adjacent watershed showed albedo variations of 10 percent during the accumulation season and about 20% during the snowmelt period [Anderson (1972)]. Snow surface temperature also undoubtedly varies considerably over the W-3 watershed. Melt rates at the snow research station are higher than the average melt rates for the watershed. The snow research station is usually bare of snow a week or two before the last snow is gone from the watershed.

## CHAPTER V: MAGNETIC TAPE INFORMATION

### INTRODUCTION

This chapter contains information on the contents and acquisition of the magnetic tape. The tape contains data for the W-3 watershed. The watershed data included on the tape are daily and hourly precipitation for individual stations, mean areal precipitation, air temperature at the R-3 measurement site, mean daily discharge, and stage data for the W-3 weir. The methods of collecting and processing these data are described in chapter III, sections 1-4. In addition to the watershed data, the tape contains the data for the NOAA-ARS Snow Research Station. Detailed information on the collection and processing of these data is given in chapter IV.

### GENERAL INFORMATION ON THE MAGNETIC TAPE

The magnetic tape contains 14 files of data. The first 13 files contain card images. The logical record length is 80 and the blocksize is 6400. Thus, 80 card images are contained in each physical record. Each tape record in the last (14th) file contains 3840 characters. The last file is unblocked (one logical record per physical record). The tape is nonlabeled.

Requests for a copy of the magnetic tape should be mailed to:

Hydrologic Data Laboratory  
Agricultural Research Service, USDA  
Room 236, Bldg. 007  
Beltsville Agricultural Research Center  
Beltsville, Maryland 20705

Please specify "tape containing data for the ARS Sleepers River W-3 watershed and the NOAA-ARS Snow Research Station-water years 1960-1974." Available options such as number of tracks, tape density, etc., will be provided by the Hydrologic Data Laboratory upon receiving the request for the tape. Those requesting the data are expected to furnish a tape and pay expenses related to data transfer, including personnel and computer time.

### CONTENTS OF THE MAGNETIC TAPE

This section describes the contents of each of the 14 files on the magnetic tape. The first 13 files contain W-3 watershed data in card image form. The last file contains data from the NOAA-ARS Snow Research Station. Table 5.1 summarizes the contents of the magnetic tape. The standard punched card format used for most of the card image files is described in Appendix H. The other formats used are as follows:

Table 5.1. Summary of the contents of the magnetic tape

| File Number | Description of Contents                                                                                                                                            | Period of Record                                                                                                                               | Format                       | Number of Card Images                                       |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------|
| 1           | Hourly precipitation - station R-1                                                                                                                                 | 10/59 - 12/74                                                                                                                                  | Standard punched card format | 2062                                                        |
| 2           | Hourly precipitation - station R-3                                                                                                                                 | 1/61 - 9/74                                                                                                                                    | Standard punched card format | 2604                                                        |
| 3           | Hourly precipitation - station R-12                                                                                                                                | 10/59 - 12/74                                                                                                                                  | Standard punched card format | 2124                                                        |
| 4           | Hourly precipitation - station R-7<br>station R-4                                                                                                                  | 10/59 - 12/63<br>1/64 - 9/74                                                                                                                   | Standard punched card format | 491<br>1427                                                 |
| 5           | Daily precipitation - station R-1<br>station R-3<br>station R-4<br>station R-6 + 6A<br>station R-7<br>station R-12<br>station R-16<br>station R-25<br>station R-29 | 10/59 - 12/74<br>1/61 - 9/74<br>1/64 - 9/74<br>1/62 - 12/74<br>10/59 - 12/63<br>10/59 - 12/74<br>10/59 - 12/74<br>1/67 - 12/74<br>6/64 - 12/74 | Standard punched card format | 366<br>330<br>258<br>312<br>102<br>366<br>366<br>192<br>254 |
| 6           | Hourly mean areal precipitation for the W-3 watershed                                                                                                              | 10/59 - 9/74                                                                                                                                   | Standard punched card format | 2021                                                        |
| 7           | Six-hourly mean areal precipitation for the W-3 watershed                                                                                                          | 10/59 - 9/74                                                                                                                                   | Standard punched card format | 738                                                         |
| 8           | Daily mean areal precipitation for the W-3 watershed                                                                                                               | 10/59 - 9/74                                                                                                                                   | Standard punched card format | 360                                                         |
| 9           | Six-hourly mean temperature for station R-3                                                                                                                        | 10/59 - 9/74                                                                                                                                   | Standard punched card format | 1425                                                        |

Table 5.1. Cont'd.

| File Number | Description of Contents                                                                            | Period of Record                                                | Format                                                          | Number of Card Images                                             |
|-------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------|
| 10          | Daily air temperatures - station R-3<br>maximum temperature<br>minimum temperature                 | 10/59 - 9/74<br>10/59 - 9/74                                    | Standard punched card format                                    | 360<br>360                                                        |
| 11          | Hourly air temperature<br>station R-3<br>station R-12, adjusted to R-3<br>station R-12, unadjusted | 11/24/60 - 12/31/69<br>10/1/59 - 11/23/60<br>10/1/59 - 12/31/60 | One card per day<br>format (see write-up for details)           | 2596<br>419<br>458                                                |
| 12          | Mean daily discharge for the<br>W-3 watershed                                                      | 10/59 - 12/74                                                   | Standard punched card format                                    | 366                                                               |
| 13          | Breakpoint stage data for the<br>W-3 weir                                                          | 1/60 - 12/74                                                    | 8 entries per card<br>(see write-up for details)                | 3913                                                              |
| 14          | NOAA-ARS Snow Research Station data                                                                | 12/68 - 4/69<br>and<br>11/69 - 9/74                             | Snow research station tape format<br>(see write-up for details) | 463 records<br>(not card images)<br>3840<br>characters per record |



1. Hourly air temperature one card per day format (file 11)

| <u>Column</u> | <u>Contents</u>                                                         |
|---------------|-------------------------------------------------------------------------|
| 1-2           | station number; R-3 = 03, and R-12 = 12.                                |
| 3-4           | month number                                                            |
| 5-6           | day                                                                     |
| 7-8           | year                                                                    |
| 9-30          | air temperature for each hour of the day<br>in °F. 3 columns per value. |

2. Breakpoint stage data format (file 13). The breakpoint stage data for the W-3 weir contains an entry whenever there is a change in the slope of the continuous stage record. Thus, the continuous stage record can be reconstructed by connecting these breakpoint entries with straight lines. Each calendar year of breakpoint stage data begins with a header card. The year is punched in columns 77-80 of the header card. Each calendar year ends with a card that contains nines in columns 1-6. The intermediate cards contain the breakpoint stage data. There are 8 entries per card, 10 columns per entry. Each breakpoint entry is composed of a time and a stage value. The format of each entry is:

I6        time in minutes since the beginning of the  
          calendar year. 525600 minutes per year;  
          527040 minutes for a leap year.

F4.2      gage height in feet.

There is an entry at the end of each day in addition to each breakpoint.

3. NOAA-ARS Snow Research Station magnetic tape format (file 14). Each tape record for the snow research station contains 3840 characters. Each record contains values for one month for the indicated type of data. For each type of data, a record is written each month only if that variable was measured and the measurements are considered to be reasonably reliable. Thus, a record for each of the data types is not available for every month. Air temperature, dew point, wind speed, incoming solar radiation, and precipitation are available for the entire period of record. The other data types are not.

There are two record formats used for the snow research station data: daily data format and hourly data format. Daily data, if available, is always contained in the first

record for the month. The daily data format is as follows:

| <u>Character</u> | <u>Contents</u>                                                                                                                 |
|------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1-2              | 'W3'                                                                                                                            |
| 3                | blank                                                                                                                           |
| 4-6              | type of data code, 'PDO', for point<br>daily observations                                                                       |
| 7-8              | month number                                                                                                                    |
| 9-10             | year                                                                                                                            |
| 11-134           | observation time (military time)<br>for each day of the month, 4<br>characters per day, blank if no<br>measurements were taken. |
| 135-227          | snow course water-equivalent,<br>tenths of an inch, 3 characters<br>per day.                                                    |
| 228-320          | snow course depth, tenths of an<br>inch, 3 characters per day.                                                                  |
| 321-413          | snow pillow water-equivalent at<br>midnight, tenths of an inch,<br>3 characters per day.                                        |
| 414-506          | average depth at snow stakes, tenths<br>of an inch, 3 characters per day.                                                       |
| 507-568          | snow surface density, percent,<br>2 characters per day.                                                                         |
| 569-3840         | filled in with nines                                                                                                            |

Missing values of water-equivalent, depth, and density are represented by a field of nines.

The record format for hourly snow research station data is:

| <u>Character</u> | <u>Contents</u>                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1-2              | 'W3'                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 3                | blank                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4-6              | type of data code:<br>'PTA' air temperature, °F,<br>'PTD' dew-point, °F,<br>'PUT' wind speed, tenths of a mph,<br>'PQI' incoming solar radiation,<br>langley (cal·cm <sup>-2</sup> ),<br>'PQR' reflected solar radiation,<br>langley,<br>'PQA' incoming longwave radiation,<br>langley,<br>'PTS' snow surface temperature, °F,<br>'PPO' snow cover outflow from<br>lysimeters, thousandths of an inch, and<br>'PPX' precipitation, hundredths of an inch. |
| 7-8              | month number                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| <u>Character</u> | <u>Contents</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9-10             | year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 11-2986          | data values for each hour of the month,<br>4 characters per hour, missing data<br>are a field of nines, missing time<br>distribution (snow cover outflow<br>only) is represented by '9998'<br>followed by the accumulated value.                                                                                                                                                                                                                                                                                               |
| 2987-3000        | filled in with nines                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 3001-3744        | quality of data indicators for each hour<br>of the month, 1 character per hour:<br>blank indicates measured value,<br>'M' = missing data,<br>'G' = estimated value, considered a<br>good estimate,<br>'F' = estimated value, considered a<br>fair estimate,<br>'P' = estimated value, considered a<br>poor estimate,<br>'T' = thermocouple used for measure-<br>ment (snow surface temperature<br>only),<br>'-' = missing time distribution<br>(lysimeter data only), and<br>'A' = accumulated value<br>(lysimeter data only). |
| 3745-3840        | filled in with blanks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

The precipitation record is always available and is always the last record of the month.

## BIBLIOGRAPHY

- Amorocho, J., and Espildora B., 1966: "Mathematical Simulation of the Snow Melting Processes," Water Science and Engineering Papers No. 3001, University of California, Davis, Calif., 156 pp.
- Anderson, Eric A., and Crawford, Norman H., 1964: "The Synthesis of Continuous Snowmelt Runoff Hydrographs on a Digital Computer," Department of Civil Engineering Technical Report No. 36, Stanford University, Stanford, Calif., 103 pp.
- Anderson, E. A., and Baker, D. R., 1967: "Estimating Incident Terrestrial Radiation under all Atmospheric Conditions," Water Resources Research, Vol. 3, No. 4, pp 975-987.
- Anderson, E. A., 1968: "Development and Testing of Snow Pack Energy Balance Equations," Water Resources Research, Vol. 4, No. 1, pp. 19-37.
- Anderson, Eric, 1972: "Techniques for Predicting Snow Cover Runoff," Proceedings of Banff Symposium: The Role of Snow and Ice in Hydrology, Intern. Assoc. Hydrologic Sci. Publ. 107, Vol. 2, pp. 840-861.
- Anderson, Eric A., 1973: "National Weather Service River Forecast System--Snow Accumulation and Ablation Model," NOAA Technical Memorandum NWS HYDRO-17, U.S. Dept. of Commerce, Silver Spring, Md., 217 pp.
- Anderson, Eric A., 1976: "A Point Energy and Mass Balance Model of a Snow Cover," NOAA Technical Report NWS 19, U.S. Dept. of Commerce, Silver Spring, Md., 150 pp.
- Benson, M. A. and Dalrymple, Tate, 1968; "General Field and Office Procedures for Indirect Discharge Measurements," Techniques of Water-Resources Investigations of the United States Geological Survey, Book 3, Chapter A1, 30 pp. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402)
- Bissell, V. C., and Peck, E. L., 1974: "Measurement of Snow at a Remote Site: Natural Radioactivity Technique," Advanced Concepts and Techniques in the Study of Snow and Ice Resources, National Academy of Sciences, Washington, D. C., pp. 604-613.
- Dunne, Thomas, and Black, Richard D., 1970a: "An Experimental Investigation of Runoff Production in Permeable Soils," Water Resources Research, Vol. 6, No. 2, pp. 478-490.
- Dunne, Thomas, and Black, Richard D., 1970b: "Partial Area Contributions to Storm Runoff in a Small New England Watershed," Water Resources Research, Vol. 6, No. 5, pp. 1296-1311.



Eggleston, Keith O., Israelsen, Eugene K., and Riley, J. Paul, 1971: "Hybrid Computer Simulation of the Accumulation and Melt Processes in a Snowpack," PRWG-1, Utah Water Research Laboratory, Utah State University, Logan, Utah, 77 pp.

Engman, Edwin T., and Hershfield, David M., 1969: "Precipitation Climatology of the Sleepers River Watershed near Danville, Vt.," ARS 41-148, Agricultural Research Service, U.S. Dept. of Agriculture, Beltsville, Md., 22 pp.

Hendrick, Robert L., and DeAngelis, Roger J., 1976: "Seasonal Snow Accumulation, Melt and Water Input - A New England Model," Journal of Applied Meteorology, Vol. 15, No. 7, pp. 717-727.

Horton, R. E., 1907: "Weir Experiments, Coefficients, and Formulas," U.S. Geological Survey Water Supply Paper 200, U.S. Government Printing Office, Washington, D.C., pp. 49-123.

Johnson, Martin L., 1963: "A Comparison of Snowmelt Hydrographs," Proceedings of the Eastern Snow Conference, pp. 149-170.

Johnson, Martin L., and Anderson, Eric, 1968: "The Cooperative Snow Hydrology Project -- ESSA Weather Bureau and ARS Sleepers River Watershed," Proceedings of the Eastern Snow Conference, pp. 13-23.

Kohler, M. A., Nordenson, T. J., and Baker, D.R., 1959: "Evaporation Maps for the United States," Weather Bureau Technical Paper No. 37, U.S. Dept. of Commerce, 13 pp. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402)

Larson, Lee W., 1972: "Approaches to Measuring 'True' Snowfall," Proceedings of the Eastern Snow Conference, pp. 65-76.

Smithsonian Meteorological Tables, 1968: Sixth Revised Edition, 4th Reprint, Smithsonian Institution Press, Washington, D.C., pp. 354-357.

Snow Hydrology, 1956: Summary Report of the Snow Investigations, Corps of Engineers, North Pacific Division (available as PB-151660), Portland, Oreg., 437 pp.

SSARR Model, 1972: "Program Description and User's Manual, Program 724-K5-G0010, U.S. Army Engineer Division, North Pacific, Portland, Oreg., 201 pp.

Staff, Hydrologic Research Laboratory, 1972: "National Weather Service River Forecast System, Forecast Procedures," NOAA Technical Memorandum NWS HYDRO-14, U.S. Dept. of Commerce, Silver Spring, Md., 251 pp.

Work, R. A., Stockwell, Homer J., Freeman, T. G., and Beaumont, R. T., 1965: "Accuracy of Field Snow Surveys," Cold Regions Research and Engineering Laboratory Technical Report 163, Hanover, N.H., 43 pp.

## APPENDIX A

### SUMMARY OF DAILY WATERSHED DATA

This appendix contains summaries of mean daily discharge, daily mean areal precipitation, and daily maximum and minimum temperatures for the W-3 watershed. The appendix begins with a tabulation of mean daily discharge at the W-3 weir site by water years. This is followed by a tabulation of daily mean areal precipitation values for the W-3 watershed. Next is a tabulation of daily maximum and minimum temperatures for the R-3 measurement site. The tabulations are followed by a series of summary plots. Each plot covers a period of four months. Across the top of each plot is the daily mean areal precipitation. In the middle is the daily temperature range at station R-3. On the bottom is a semi-logarithmic plot of mean daily discharge. Also included near the bottom is the water-equivalent data from the station R-3 snow course. Although none of the snow courses is representative of the average snow cover over the watershed, station R-3 is a better and more consistent indicator than any of the other available snow courses.

Detailed information on the method of collecting and processing these data is contained in chapter III, sections 2-4. Fig. 2.1 is a topographic map of the watershed showing station locations. Detailed information on each station is contained in chapter III.1.

# TABULATION OF MEAN DAILY DISCHARGE FOR THE W-3 WEIR - WATER YEARS 1960-1974

ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

LOCATION--LAT 44°28'35'', LONG 72°07'27'', 4.6 MI NORTH OF DANVILLE, CALEDONIA COUNTY.

DRAINAGE AREA--3.25 SQUARE MILES.

ELEVATION OF GAGE IS 1135 FT

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1959 TO SEPTEMBER 1960

| DAY   | OCT | NOV | DEC | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     |     |     |     | 6.3   | 4.4   | 2.9   | 22    | 12    | 6.5   | 2.0   | 3.2   | .63   |
| 2     |     |     |     | 6.3   | 4.4   | 2.8   | 14    | 13    | 5.0   | 1.6   | 1.6   | .63   |
| 3     |     |     |     | 6.3   | 4.3   | 2.8   | 13    | 10    | 4.1   | 1.5   | 1.2   | .62   |
| 4     |     |     |     | 6.3   | 4.2   | 2.9   | 30    | 9.1   | 3.7   | 1.8   | 1.0   | .78   |
| 5     |     |     |     | 6.3   | 4.2   | 2.7   | 33    | 8.3   | 3.1   | 1.7   | 2.7   | .77   |
| 6     |     |     |     | 6.5   | 4.2   | 2.7   | 21    | 7.5   | 2.9   | 1.8   | 2.4   | .68   |
| 7     |     |     |     | 6.4   | 4.5   | 2.7   | 16    | 7.1   | 2.6   | 1.6   | 1.2   | .62   |
| 8     |     |     |     | 6.0   | 4.6   | 2.7   | 15    | 6.5   | 2.5   | 1.4   | 1.1   | .59   |
| 9     |     |     |     | 5.9   | 4.6   | 2.7   | 14    | 8.0   | 2.3   | 1.4   | 1.0   | .59   |
| 10    |     |     |     | 5.9   | 4.6   | 2.6   | 13    | 9.6   | 2.2   | 1.3   | .92   | .81   |
| 11    |     |     |     | 5.9   | 16    | 2.5   | 12    | 6.7   | 2.1   | 1.1   | .85   | .88   |
| 12    |     |     |     | 5.5   | 11    | 2.6   | 23    | 6.0   | 2.0   | 1.1   | .79   | 13    |
| 13    |     |     |     | 5.0   | 7.4   | 2.7   | 24    | 7.6   | 1.8   | .94   | .77   | 8.2   |
| 14    |     |     |     | 4.8   | 6.7   | 2.7   | 31    | 8.6   | 1.7   | .99   | .76   | 4.1   |
| 15    |     |     |     | 4.9   | 6.4   | 2.7   | 51    | 19    | 5.9   | .99   | .74   | 1.6   |
| 16    |     |     |     | 5.0   | 6.3   | 2.8   | 43    | 23    | 4.7   | .92   | .72   | 1.2   |
| 17    |     |     |     | 4.9   | 5.8   | 2.8   | 48    | 12    | 2.6   | .86   | .68   | 1.0   |
| 18    |     |     |     | 4.7   | 5.6   | 2.6   | 72    | 9.5   | 3.4   | .86   | .63   | .97   |
| 19    |     |     |     | 4.6   | 6.0   | 2.5   | 35    | 8.0   | 3.1   | 1.1   | .66   | .94   |
| 20    |     |     |     | 4.7   | 5.9   | 2.5   | 26    | 6.9   | 2.3   | 2.1   | .93   | 1.3   |
| 21    |     |     |     | 4.7   | 5.4   | 2.3   | 26    | 6.0   | 2.1   | 1.7   | .97   | 1.1   |
| 22    |     |     |     | 4.6   | 4.8   | 2.3   | 26    | 5.3   | 1.8   | 1.4   | .89   | .99   |
| 23    |     |     |     | 4.6   | 4.4   | 2.3   | 24    | 5.3   | 1.6   | 1.2   | .83   | .94   |
| 24    |     |     |     | 4.6   | 4.1   | 2.3   | 25    | 8.9   | 1.6   | 1.1   | .69   | .94   |
| 25    |     |     |     | 4.6   | 3.7   | 2.2   | 30    | 8.3   | 14    | .92   | .66   | .90   |
| 26    |     |     |     | 4.5   | 3.3   | 2.0   | 24    | 5.7   | 5.2   | .81   | .62   | .83   |
| 27    |     |     |     | 4.4   | 3.1   | 2.1   | 22    | 4.7   | 3.2   | .79   | .61   | .80   |
| 28    |     |     |     | 4.3   | 3.0   | 2.9   | 20    | 4.2   | 2.3   | 1.1   | .59   | .77   |
| 29    |     |     |     | 4.2   | 2.9   | 3.1   | 17    | 3.7   | 1.8   | .99   | .64   | .82   |
| 30    |     |     |     | 4.2   |       | 5.6   | 13    | 3.4   | 1.9   | 4.1   | .68   | .93   |
| 31    |     |     |     | 4.3   |       | 2.7   |       | 4.1   |       | 11    | .59   |       |
| TOTAL |     |     |     | 161.2 | 155.8 | 108.0 | 783.0 | 258.0 | 105.2 | 52.17 | 31.62 | 48.93 |
| MEAN  |     |     |     | 5.20  | 5.37  | 3.48  | 26.1  | 8.33  | 3.51  | 1.68  | 1.02  | 1.63  |
| MAX   |     |     |     | 6.5   | 16    | 2.7   | 72    | 9.6   | 5.2   | 1.1   | 1.2   | 13    |
| MIN   |     |     |     | 4     | 2.9   | 2.0   | 12    | 3.4   | 1.6   | .79   | .59   | .59   |
| CFSM  |     |     |     | 1.60  | 1.65  | 1.07  | 8.03  | 2.85  | 1.08  | .52   | .31   | .50   |
| IN.   |     |     |     | 1.84  | 1.78  | 1.24  | 8.96  | 2.95  | 1.20  | .60   | .36   | .56   |

WATER YEAR 1960 TOTAL 1703.92 MEAN 6.22 MAX 72. MIN 0.59 CFSM 1.91 IN. 19.50

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

LOCATION--LAT 44°28'35'', LONG 72°07'27'', 4.6 MI NORTH OF DANVILLE, CALEDONIA COUNTY.

DRAINAGE AREA--3.25 SQUARE MILES.

ELEVATION OF GAGE IS 1135 FT

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1960 TO SEPTEMBER 1961

| DAY   | OCT   | NOV   | DEC  | JAN  | FEB  | MAR   | APR   | MAY   | JUN   | JUL   | AUG  | SEP   |
|-------|-------|-------|------|------|------|-------|-------|-------|-------|-------|------|-------|
| 1     | 1.7   | 5.5   | 4.3  | 2.1  | 2.6  | 4.4   | 6.5   | 19    | 4.4   | 4.0   | 1.5  | 1.4   |
| 2     | .97   | 5.8   | 3.5  | 2.2  | 2.7  | 3.9   | 7.7   | 27    | 15.0  | 4.8   | 1.4  | 2.6   |
| 3     | .90   | 4.4   | 3.5  | 2.2  | 2.7  | 4.4   | 6.5   | 23    | 17.0  | 10.5  | 1.5  | 2.3   |
| 4     | .86   | 4.0   | 3.3  | 2.1  | 2.7  | 4.5   | 6.1   | 19    | 5.1   | 5.9   | 1.5  | 3.5   |
| 5     | .86   | 3.3   | 3.4  | 2.0  | 2.2  | 4.1   | 8.0   | 15    | 4.4   | 5.1   | 1.4  | 2.4   |
| 6     | 1.8   | 3.0   | 4.1  | 2.0  | 1.7  | 3.8   | 9.8   | 14    | 4.1   | 4.6   | 1.3  | 1.6   |
| 7     | 1.4   | 2.7   | 4.5  | 2.0  | 1.6  | 4.4   | 11.8  | 14    | 3.6   | 4.0   | 1.3  | 1.3   |
| 8     | 1.0   | 2.5   | 3.1  | 2.0  | 1.5  | 4.0   | 9.5   | 13    | 3.8   | 5.9   | 1.1  | 1.3   |
| 9     | .94   | 2.6   | 2.4  | 2.0  | 1.6  | 3.9   | 9.8   | 13    | 3.6   | 7.3   | 1.1  | 1.2   |
| 10    | .94   | 2.8   | 2.4  | 2.0  | 1.6  | 3.6   | 9.4   | 25    | 15.0  | 7.1   | 1.0  | 1.1   |
| 11    | 1.0   | 3.4   | 2.5  | 1.9  | 1.6  | 5.2   | 8.3   | 13    | 11.0  | 5.3   | 1.2  | 1.1   |
| 12    | .92   | 3.0   | 2.7  | 1.9  | 1.6  | 5.2   | 8.0   | 11    | 6.6   | 3.7   | 1.3  | 1.0   |
| 13    | .85   | 2.8   | 2.7  | 1.9  | 1.6  | 5.0   | 8.0   | 10    | 11.0  | 3.0   | 1.8  | 1.0   |
| 14    | 2.4   | 2.7   | 2.5  | 1.8  | 1.6  | 2.9   | 7.4   | 9.0   | 18.0  | 2.8   | 1.5  | 1.1   |
| 15    | 1.9   | 5.1   | 2.5  | 1.9  | 1.6  | 2.9   | 8.5   | 7.9   | 8.5   | 3.1   | 1.4  | 2.4   |
| 16    | 2.0   | 7.1   | 2.6  | 1.9  | 1.6  | 2.9   | 15    | 8.5   | 6.7   | 12.0  | 3.8  | 1.3   |
| 17    | 2.0   | 4.0   | 2.5  | 1.8  | 1.6  | 2.8   | 20.0  | 8.1   | 5.6   | 3.5   | 1.7  | 1.1   |
| 18    | 1.4   | 3.4   | 2.5  | 1.7  | 1.6  | 3.6   | 14    | 6.9   | 4.9   | 3.9   | 1.4  | 1.1   |
| 19    | 1.9   | 3.1   | 2.5  | 1.6  | 2.6  | 2.8   | 14    | 6.3   | 4.3   | 3.2   | 1.2  | .99   |
| 20    | 7.3   | 2.9   | 2.3  | 1.5  | 2.3  | 2.7   | 16    | 5.8   | 4.1   | 2.9   | 1.2  | .90   |
| 21    | 2.9   | 2.9   | 2.4  | 1.5  | 2.2  | 2.7   | 22    | 5.9   | 4.7   | 3.5   | 5.1  | 1.0   |
| 22    | 1.8   | 2.7   | 2.4  | 1.5  | 1.9  | 2.8   | 25    | 6.7   | 25.0  | 3.4   | 4.7  | 1.0   |
| 23    | 2.3   | 2.4   | 2.3  | 1.6  | 2.6  | 3.4   | 27    | 5.6   | 10.0  | 3.6   | 2.3  | .91   |
| 24    | 1.4   | 2.0   | 2.3  | 1.8  | 5.9  | 3.7   | 28    | 5.0   | 9.0   | 2.7   | 2.0  | .90   |
| 25    | 14    | 2.7   | 2.3  | 2.1  | 5.2  | 3.5   | 27    | 4.9   | 9.9   | 3.5   | 1.8  | .86   |
| 26    | 7.0   | 2.6   | 2.3  | 2.5  | 22.7 | 3.6   | 46    | 5.4   | 11.0  | 3.4   | 2.5  | .86   |
| 27    | 4.1   | 2.7   | 2.3  | 2.5  | 7.7  | 4.4   | 28    | 8.7   | 7.9   | 2.2   | 2.3  | .78   |
| 28    | 3.2   | 2.4   | 2.4  | 2.5  | 5.0  | 7.6   | 28    | 6.2   | 6.3   | 1.9   | 1.7  | .83   |
| 29    | 2.9   | 2.6   | 2.3  | 2.3  |      |       | 14    | 24.0  | 5.1   | 1.8   | 1.8  | .86   |
| 30    | 2.7   | 8.4   | 2.0  | 2.3  |      |       | 22    | 5.9   | 4.5   | 2.0   | 1.8  | .86   |
| 31    | 2.5   |       | 2.0  | 2.4  |      | 6.4   |       | 4.9   |       | 1.7   | 1.5  |       |
| TOTAL | 90.44 | 114.5 | 84.8 | 61.7 | 91.1 | 135.2 | 500.6 | 333.9 | 253.1 | 133.3 | 61.0 | 41.25 |
| MEAN  | 2.92  | 3.82  | 2.74 | 1.99 | 3.25 | 4.36  | 16.7  | 10.8  | 8.44  | 4.30  | 1.97 | 1.37  |
| MAX   | 14    | 8.4   | 4.3  | 2.6  | 22.7 | 14    | 47    | 27    | 25    | 12    | 5.3  | 4.2   |
| MIN   | .85   | 2.5   | 2.0  | 1.5  | 1.5  | 2.7   | 6.1   | 4.9   | 3.6   | 1.7   | 1.0  | .78   |
| CFSM  | .90   | 1.17  | .84  | .61  | 1.00 | 1.34  | 5.13  | 3.31  | 2.60  | 1.32  | .61  | .42   |
| IV.   | 1.03  | 1.31  | .97  | .71  | 1.04 | 1.55  | 5.73  | 3.82  | 2.90  | 1.53  | .70  | .47   |

WATER YEAR 1961 TOTAL 1900.89 MEAN 5.21 MAX 47. MIN 0.78 CFSM 1.60 IN. 21.75

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1961 TO SEPTEMBER 1962

| DAY   | OCT   | NOV  | DEC  | JAN  | FEB  | MAR  | APR   | MAY   | JUN  | JUL   | AUG  | SEP  |
|-------|-------|------|------|------|------|------|-------|-------|------|-------|------|------|
| 1     | .84   | 2.4  | 1.6  | 1.5  | 1.3  | 1.3  | 28    | 14    | 3.3  | 1.3   | 5.2  | 1.2  |
| 2     | .85   | 1.6  | 1.5  | 1.4  | 1.3  | 1.2  | 16    | 14    | 3.2  | 1.1   | 2.8  | 1.1  |
| 3     | .89   | 1.2  | 1.5  | 1.4  | 1.3  | 1.2  | 9.0   | 17    | 2.9  | 1.0   | 1.8  | 1.0  |
| 4     | 1.9   | 1.3  | 1.8  | 1.4  | 1.2  | 1.2  | 8.7   | 14    | 2.6  | .99   | 1.9  | 1.0  |
| 5     | 1.1   | 2.3  | 10   | 1.4  | 1.5  | 1.2  | 10    | 13    | 2.6  | .90   | 2.0  | 1.1  |
| 6     | .99   | 1.6  | 4.4  | 1.7  | 2.1  | 1.2  | 13    | 11    | 2.7  | .88   | 2.1  | 2.0  |
| 7     | .94   | 3.2  | 2.8  | 3.0  | 1.6  | 1.2  | 40    | 9.5   | 2.3  | .86   | 5.0  | 1.2  |
| 8     | .94   | 2.1  | 2.2  | 2.4  | 1.4  | 1.2  | 53    | 8.3   | 2.1  | .86   | 3.6  | 1.1  |
| 9     | .92   | 1.6  | 2.0  | 2.0  | 1.4  | 1.2  | 39    | 7.4   | 1.9  | 4.1   | 2.4  | 1.0  |
| 10    | .86   | 1.4  | 2.5  | 1.7  | 1.3  | 1.4  | 35    | 6.8   | 1.8  | 1.9   | 2.9  | 3.4  |
| 11    | .86   | 1.3  | 2.0  | 1.6  | 1.2  | 1.5  | 22    | 6.3   | 2.7  | 1.2   | 5.1  | 3.4  |
| 12    | .86   | 1.2  | 1.8  | 1.6  | 1.2  | 1.5  | 21    | 6.0   | 2.3  | 1.1   | 2.6  | 3.1  |
| 13    | .86   | 1.4  | 2.0  | 1.5  | 1.2  | 1.4  | 19    | 5.5   | 1.9  | 3.8   | 2.2  | 2.2  |
| 14    | 1.3   | 2.2  | 1.6  | 1.4  | 1.2  | 1.4  | 15    | 6.7   | 1.6  | 1.7   | 3.6  | 1.9  |
| 15    | 1.6   | 1.7  | 1.7  | 2.1  | 1.2  | 1.3  | 14    | 6.4   | 1.5  | 1.7   | 5.0  | 1.6  |
| 16    | 1.1   | 1.5  | 2.4  | 7.6  | 1.2  | 1.4  | 13    | 6.4   | 1.4  | 1.5   | 2.4  | 1.4  |
| 17    | 1.0   | 2.8  | 1.3  | 3.8  | 1.2  | 1.3  | 11    | 5.7   | 1.3  | 1.6   | 2.0  | 2.4  |
| 18    | 1.0   | 1.8  | 1.6  | 2.5  | 1.2  | 1.3  | 11    | 5.1   | 1.2  | 1.2   | 1.7  | 11   |
| 19    | .96   | 1.5  | 1.6  | 2.1  | 1.2  | 1.3  | 12    | 4.6   | 4.2  | 1.1   | 1.6  | 3.0  |
| 20    | .94   | 1.3  | 1.6  | 2.0  | 1.2  | 1.4  | 14    | 5.9   | 3.1  | 1.0   | 1.6  | 2.8  |
| 21    | .90   | 1.3  | 1.6  | 1.9  | 1.2  | 1.4  | 16    | 18    | 2.0  | 1.5   | 3.3  | 2.3  |
| 22    | .86   | 1.3  | 1.6  | 1.8  | 1.2  | 1.5  | 17    | 6.4   | 1.6  | 1.3   | 2.6  | 2.0  |
| 23    | .86   | 1.5  | 1.6  | 1.7  | 1.2  | 1.6  | 23    | 5.1   | 5.6  | 1.2   | 1.8  | 2.0  |
| 24    | .86   | 5.1  | 1.5  | 1.6  | 1.2  | 1.6  | 15    | 7.6   | 3.8  | 3.4   | 1.5  | 1.8  |
| 25    | .86   | 4.8  | 1.5  | 1.6  | 1.2  | 1.6  | 13    | 9.0   | 6.9  | 1.5   | 1.4  | 1.7  |
| 26    | .86   | 2.4  | 1.5  | 1.6  | 1.3  | 1.7  | 13    | 5.5   | 2.7  | 1.6   | 1.2  | 2.5  |
| 27    | .86   | 2.0  | 1.6  | 1.6  | 1.3  | 2.0  | 15    | 4.6   | 1.8  | 2.2   | 1.2  | 3.8  |
| 28    | .86   | 2.0  | 1.6  | 1.5  | 1.3  | 3.5  | 14    | 4.1   | 1.5  | 1.9   | 2.2  | 4.0  |
| 29    | .86   | 1.8  | 1.6  | 1.4  |      | 5.4  | 13    | 3.7   | 1.4  | 1.3   | 2.2  | 2.5  |
| 30    | 1.7   | 1.7  | 1.5  | 1.3  |      | 11   | 18    | 3.4   | 1.2  | 1.2   | 1.9  | 2.3  |
| 31    | 1.5   |      | 1.5  | 1.3  |      | 19   |       | 3.2   |      | 21    | 1.3  |      |
| TOTAL | 31.69 | 59.3 | 65.0 | 61.4 | 36.3 | 76.4 | 560.7 | 244.2 | 75.1 | 67.89 | 77.1 | 76.8 |
| MEAN  | 1.02  | 1.98 | 2.10 | 1.98 | 1.30 | 2.46 | 18.7  | 7.88  | 2.50 | 2.19  | 2.49 | 2.56 |
| MAX   | 1.9   | 5.1  | 10   | 7.6  | 2.1  | 19   | 53    | 18    | 6.3  | 2.1   | 5.2  | 11   |
| MIN   | .84   | 1.2  | 1.3  | 1.3  | 1.2  | 1.2  | 8.7   | 3.2   | 1.2  | .86   | 1.2  | 1.0  |
| CFSM  | .31   | .61  | .65  | .61  | .40  | .76  | 5.75  | 2.42  | .86  | .67   | .77  | .79  |
| IV.   | .36   | .68  | .74  | .70  | .42  | .87  | 6.42  | 2.79  | .86  | .78   | .88  | .88  |

WATER YEAR 1962 TOTAL 1431.88 MEAN 3.92 MAX 53. MIN 0.84 CFSM 1.21 IN. 16.38



ARS W-3 WATERSHED NEAR DANVILLE, VERMONT  
 LOCATION--LAT 44°23'35'', LONG 72°07'27'', 4.6 MI NORTH OF DANVILLE, CALEDONIA COUNTY.  
 DRAINAGE AREA--3.25 SQUARE MILES. ELEVATION OF GAGE IS 1135 FT

| DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1962 TO SEPTEMBER 1963 |       |       |       |      |      |      |       |       |      |       |      |       |
|--------------------------------------------------------------------------------|-------|-------|-------|------|------|------|-------|-------|------|-------|------|-------|
| DAY                                                                            | OCT   | NOV   | DEC   | JAN  | FEB  | MAR  | APR   | MAY   | JUN  | JUL   | AUG  | SEP   |
| 1                                                                              | 2.1   | 22    | 5.1   | 2.7  | 1.8  | 1.5  | 9.4   | 34    | 3.8  | 1.7   | 1.2  | 1.6   |
| 2                                                                              | 2.0   | 10    | 5.0   | 2.6  | 1.8  | 1.4  | 14    | 20    | 3.4  | 1.5   | 2.0  | 1.3   |
| 3                                                                              | 1.8   | 8.7   | 4.7   | 2.5  | 1.9  | 1.4  | 32    | 17    | 3.7  | 2.4   | 2.3  | 1.2   |
| 4                                                                              | 1.7   | 10    | 5.1   | 2.5  | 2.0  | 1.5  | 21    | 17    | 3.8  | 1.8   | 3.8  | 2.2   |
| 5                                                                              | 4.4   | 8.5   | 5.0   | 2.5  | 1.9  | 1.5  | 14    | 21    | 3.6  | 2.7   | 3.1  | 1.4   |
| 6                                                                              | 30    | 7.2   | 7.3   | 2.5  | 1.8  | 1.5  | 12    | 14    | 3.5  | 2.1   | 1.7  | 1.3   |
| 7                                                                              | 45    | 6.6   | 6.7   | 2.5  | 1.8  | 1.5  | 14    | 12    | 3.5  | 2.1   | 1.3  | 1.1   |
| 8                                                                              | 13    | 7.1   | 5.2   | 2.5  | 1.8  | 1.5  | 14    | 14    | 3.2  | 4.5   | 1.3  | 1.1   |
| 9                                                                              | 15    | 7.3   | 4.9   | 2.5  | 1.7  | 1.5  | 12    | 17    | 3.2  | 3.8   | 1.2  | 1.1   |
| 10                                                                             | 14    | 8.9   | 4.7   | 2.5  | 1.7  | 1.5  | 11    | 13    | 2.9  | 2.5   | 1.8  | 1.0   |
| 11                                                                             | 11    | 16    | 4.1   | 2.5  | 1.7  | 1.5  | 11    | 17    | 2.8  | 2.2   | 1.3  | 1.0   |
| 12                                                                             | 11    | 9.2   | 4.3   | 2.5  | 1.7  | 1.5  | 17    | 20    | 3.4  | 1.9   | 1.3  | 1.2   |
| 13                                                                             | 9.2   | 7.6   | 3.5   | 2.5  | 1.7  | 1.5  | 19    | 16    | 3.2  | 1.6   | 3.2  | 1.5   |
| 14                                                                             | 7.7   | 7.0   | 3.6   | 2.4  | 1.6  | 1.5  | 18    | 13    | 2.6  | 1.7   | 7.6  | 1.2   |
| 15                                                                             | 7.0   | 6.4   | 6.0   | 2.4  | 1.6  | 1.5  | 19    | 11    | 2.6  | 2.0   | 4.2  | 1.1   |
| 16                                                                             | 6.5   | 6.0   | 3.8   | 2.3  | 1.6  | 1.5  | 26    | 9.3   | 2.5  | 1.9   | 2.8  | 1.1   |
| 17                                                                             | 6.6   | 6.0   | 3.1   | 2.1  | 1.6  | 1.5  | 24    | 8.5   | 3.8  | 1.5   | 1.9  | 1.0   |
| 18                                                                             | 6.0   | 5.8   | 3.0   | 2.0  | 1.6  | 1.6  | 43    | 9.6   | 4.0  | 1.7   | 2.0  | .95   |
| 19                                                                             | 5.5   | 5.2   | 3.0   | 2.0  | 1.6  | 1.5  | 27    | 10    | 2.6  | 2.1   | 1.7  | .96   |
| 20                                                                             | 5.2   | 4.9   | 2.9   | 2.2  | 1.6  | 1.6  | 48    | 11    | 2.4  | 1.5   | 1.4  | 1.1   |
| 21                                                                             | 6.0   | 5.3   | 2.6   | 2.2  | 1.6  | 1.6  | 55    | 9.8   | 8.8  | 2.8   | 1.3  | .97   |
| 22                                                                             | 5.7   | 16    | 2.7   | 2.1  | 1.6  | 1.7  | 42    | 8.6   | 3.9  | 2.1   | 1.2  | .97   |
| 23                                                                             | 5.3   | 8.9   | 2.7   | 2.1  | 1.6  | 1.6  | 26    | 8.3   | 3.1  | 1.5   | 1.7  | .97   |
| 24                                                                             | 5.2   | 6.9   | 2.7   | 2.1  | 1.5  | 1.7  | 26    | 6.9   | 2.5  | 1.3   | 1.8  | .96   |
| 25                                                                             | 5.3   | 6.2   | 2.7   | 2.1  | 1.5  | 2.2  | 22    | 6.1   | 2.1  | 1.0   | 1.5  | .94   |
| 26                                                                             | 5.2   | 5.6   | 2.8   | 2.0  | 1.5  | 4.9  | 20    | 5.5   | 2.0  | .92   | 1.3  | .91   |
| 27                                                                             | 5.0   | 5.3   | 2.9   | 2.0  | 1.5  | 12   | 18    | 5.1   | 1.9  | .85   | 1.2  | .91   |
| 28                                                                             | 6.5   | 5.1   | 2.9   | 1.9  | 1.5  | 9.8  | 19    | 4.8   | 2.0  | .85   | 1.2  | 1.1   |
| 29                                                                             | 9.2   | 5.1   | 2.9   | 1.8  | 1.5  | 6.2  | 20    | 4.8   | 1.8  | .93   | 1.3  | 2.1   |
| 30                                                                             | 5.8   | 5.1   | 2.9   | 1.8  | 1.5  | 6.4  | 30    | 4.8   | 1.8  | 2.8   | 1.3  | 1.8   |
| 31                                                                             | 20    | 2.8   | 2.8   | 1.8  | 1.5  | 8.6  |       | 4.3   |      | 1.3   | 3.2  |       |
| TOTAL                                                                          | 283.9 | 239.9 | 121.6 | 70.1 | 46.8 | 86.7 | 683.4 | 373.4 | 94.4 | 59.55 | 64.1 | 36.04 |
| MEAN                                                                           | 9.16  | 8.00  | 3.92  | 2.26 | 1.67 | 2.80 | 22.8  | 12.1  | 3.15 | 1.92  | 2.07 | 1.20  |
| MAX                                                                            | 45    | 22    | 7.3   | 2.7  | 2.0  | 12   | 55    | 34    | 8.8  | 4.5   | 7.6  | 2.2   |
| MIN                                                                            | 1.7   | 4.9   | 2.6   | 1.8  | 1.5  | 1.4  | 9.4   | 4.3   | 1.8  | .85   | 1.2  | .91   |
| CFSM                                                                           | 2.82  | 2.46  | 1.21  | .70  | .51  | .86  | 7.01  | 3.71  | 1.97 | .59   | .64  | .37   |
| IN.                                                                            | 3.25  | 2.75  | 1.39  | .80  | .54  | .99  | 7.82  | 4.27  | 1.08 | .68   | .73  | .41   |
| WATER YEAR 1963 TOTAL 2159.89 MEAN 5.92 MAX 55. MIN 0.85 CFSM 1.82 IN. 24.71   |       |       |       |      |      |      |       |       |      |       |      |       |

| DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1963 TO SEPTEMBER 1964 |       |       |       |      |      |       |       |       |      |      |      |      |
|--------------------------------------------------------------------------------|-------|-------|-------|------|------|-------|-------|-------|------|------|------|------|
| DAY                                                                            | OCT   | NOV   | DEC   | JAN  | FEB  | MAR   | APR   | MAY   | JUN  | JUL  | AUG  | SEP  |
| 1                                                                              | 1.3   | 2.2   | 5.4   | 2.5  | 2.8  | 2.1   | 4.1   | 10    | 4.4  | 1.6  | 1.1  | 1.3  |
| 2                                                                              | 1.2   | 2.0   | 5.0   | 2.4  | 2.7  | 1.9   | 3.9   | 9.6   | 4.2  | 1.8  | 1.1  | 1.3  |
| 3                                                                              | 1.2   | 1.8   | 4.1   | 2.3  | 2.6  | 2.1   | 3.9   | 8.8   | 3.8  | 4.3  | 1.1  | 1.2  |
| 4                                                                              | 1.3   | 1.5   | 3.8   | 2.5  | 2.5  | 2.6   | 3.6   | 8.3   | 6.6  | 3.6  | 1.1  | 1.7  |
| 5                                                                              | 1.2   | 1.6   | 3.3   | 2.4  | 2.5  | 2.8   | 3.9   | 7.7   | 4.9  | 2.4  | 1.1  | 1.9  |
| 6                                                                              | 1.1   | 2.5   | 4.1   | 2.3  | 2.4  | 14    | 3.7   | 7.3   | 4.0  | 2.2  | 1.1  | 1.4  |
| 7                                                                              | 1.1   | 5.0   | 3.6   | 2.3  | 2.4  | 7.6   | 5.6   | 6.9   | 3.6  | 2.3  | 1.0  | 1.2  |
| 8                                                                              | 1.1   | 4.1   | 3.2   | 2.2  | 2.5  | 6.3   | 14    | 6.9   | 3.6  | 2.3  | 2.0  | 1.2  |
| 9                                                                              | 1.0   | 7.2   | 9.1   | 2.3  | 2.5  | 5.8   | 9.8   | 12    | 3.2  | 1.9  | 1.4  | 1.5  |
| 10                                                                             | 1.0   | 3.5   | 5.7   | 2.5  | 2.3  | 4.5   | 9.6   | 9.6   | 3.2  | 1.8  | 1.2  | 1.3  |
| 11                                                                             | 1.1   | 5.1   | 4.3   | 2.2  | 2.2  | 5.3   | 13    | 10    | 3.4  | 1.8  | 1.1  | 1.7  |
| 12                                                                             | 1.3   | 4.4   | 8.7   | 2.0  | 2.2  | 4.8   | 17    | 7.5   | 2.8  | 1.8  | 2.4  | 1.7  |
| 13                                                                             | 1.1   | 3.2   | 4.1   | 2.1  | 2.2  | 4.3   | 25    | 6.8   | 2.7  | 1.7  | 2.3  | 1.3  |
| 14                                                                             | 1.0   | 2.8   | 3.6   | 2.0  | 2.2  | 4.2   | 52    | 20    | 2.7  | 2.6  | 1.4  | 1.2  |
| 15                                                                             | 1.0   | 2.4   | 3.4   | 2.0  | 2.2  | 6.3   | 52    | 10    | 2.7  | 2.3  | 1.7  | 1.3  |
| 16                                                                             | 1.0   | 2.5   | 3.3   | 2.0  | 2.2  | 5.0   | 37    | 8.0   | 3.5  | 1.7  | 1.5  | 1.3  |
| 17                                                                             | 1.0   | 2.4   | 3.3   | 2.0  | 2.1  | 4.9   | 29    | 10    | 2.3  | 1.7  | 1.3  | 1.2  |
| 18                                                                             | 1.0   | 3.9   | 3.2   | 2.0  | 2.1  | 4.2   | 31    | 7.2   | 2.2  | 2.5  | 1.3  | 1.2  |
| 19                                                                             | 1.0   | 5.6   | 3.0   | 2.0  | 2.1  | 3.9   | 26    | 8.2   | 2.1  | 3.5  | 1.1  | 1.2  |
| 20                                                                             | 1.0   | 3.4   | 2.8   | 2.1  | 2.1  | 3.9   | 20    | 8.5   | 2.0  | 3.4  | 1.1  | 1.1  |
| 21                                                                             | 1.0   | 3.1   | 2.7   | 4.7  | 2.1  | 3.9   | 20    | 6.5   | 1.9  | 2.2  | 1.1  | 1.1  |
| 22                                                                             | .97   | 3.2   | 2.6   | 3.7  | 2.1  | 4.1   | 34    | 6.0   | 1.8  | 4.5  | 3.7  | 1.3  |
| 23                                                                             | .97   | 6.0   | 2.6   | 2.9  | 2.0  | 4.2   | 29    | 5.3   | 1.7  | 3.1  | 17   | 1.3  |
| 24                                                                             | .97   | 6.8   | 2.6   | 2.8  | 2.0  | 4.1   | 20    | 4.7   | 1.9  | 1.9  | 8.6  | 1.2  |
| 25                                                                             | 1.0   | 3.6   | 2.6   | 6.1  | 2.0  | 5.1   | 18    | 11    | 2.2  | 1.7  | 2.8  | 1.2  |
| 26                                                                             | 1.0   | 3.1   | 2.6   | 6.3  | 2.0  | 6.7   | 18    | 6.4   | 1.9  | 1.6  | 3.1  | 1.2  |
| 27                                                                             | .97   | 3.2   | 2.6   | 3.8  | 1.9  | 6.2   | 17    | 7.1   | 4.0  | 1.5  | 2.3  | 1.3  |
| 28                                                                             | .97   | 2.8   | 2.6   | 3.3  | 1.8  | 4.8   | 16    | 7.8   | 2.1  | 1.3  | 1.7  | 2.6  |
| 29                                                                             | .96   | 4.7   | 2.4   | 3.1  | 1.8  | 4.7   | 14    | 6.1   | 1.8  | 1.3  | 1.5  | 1.6  |
| 30                                                                             | .97   | 15    | 2.4   | 3.2  | 1.8  | 4.4   | 12    | 5.1   | 1.8  | 1.4  | 1.4  | 1.4  |
| 31                                                                             | .97   |       | 2.4   | 2.9  | 1.8  | 4.0   |       | 4.7   |      | 1.2  | 1.4  |      |
| TOTAL                                                                          | 32.75 | 118.6 | 115.1 | 86.9 | 64.6 | 173.9 | 562.1 | 254.0 | 89.0 | 68.9 | 72.0 | 41.4 |
| MEAN                                                                           | 1.06  | 3.95  | 3.71  | 2.80 | 2.23 | 5.61  | 18.7  | 8.19  | 2.97 | 2.22 | 2.32 | 1.38 |
| MAX                                                                            | 1.3   | 15    | 9.1   | 6.3  | 2.8  | 28    | 52    | 20    | 6.6  | 4.5  | 17   | 2.6  |
| MIN                                                                            | .96   | 1.5   | 2.4   | 2.0  | 1.8  | 1.9   | 3.6   | 4.7   | 1.7  | 1.3  | 1.0  | 1.1  |
| CFSM                                                                           | .33   | 1.22  | 1.14  | .86  | .69  | 1.73  | 5.77  | 2.52  | 1.91 | .68  | .71  | .42  |
| IN.                                                                            | .37   | 1.36  | 1.32  | .99  | .74  | 1.99  | 6.43  | 2.91  | 1.02 | .79  | .82  | .47  |
| WATER YEAR 1964 TOTAL 1679.25 MEAN 4.59 MAX 52. MIN 0.96 CFSM 1.41 IN. 19.21   |       |       |       |      |      |       |       |       |      |      |      |      |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

LOCATION--LAT 44°28'35'', LONG 72°07'27'', 4.6 MI NORTH OF DANVILLE, CALEDONIA COUNTY.

DRAINAGE AREA--3.25 SQUARE MILES.

ELEVATION OF GAGE IS 1135 FT

## DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1964 TO SEPTEMBER 1965

| DAY   | OCT  | NOV  | DEC   | JAN  | FEB  | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|------|------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 1.3  | 2.0  | 2.5   | 4.1  | 2.2  | 2.6   | 2.6   | 9.0   | 2.9   | 1.7   | 1.2   | 13    |
| 2     | 1.3  | 1.8  | 4.6   | 4.0  | 2.2  | 2.7   | 2.6   | 8.1   | 2.3   | 1.7   | 1.2   | 13    |
| 3     | 2.1  | 1.8  | 2.3   | 4.0  | 2.1  | 3.7   | 2.6   | 7.5   | 2.1   | 1.7   | 1.2   | 4.8   |
| 4     | 1.6  | 1.8  | 2.6   | 3.7  | 2.0  | 5.3   | 2.9   | 7.3   | 2.0   | 3.4   | 1.2   | 3.7   |
| 5     | 1.5  | 2.3  | 2.9   | 3.6  | 2.1  | 6.6   | 3.2   | 6.6   | 1.9   | 2.1   | 1.1   | 3.1   |
| 6     | 1.4  | 3.7  | 2.9   | 3.5  | 2.2  | 7.5   | 4.8   | 6.0   | 1.7   | 5.9   | 1.1   | 2.9   |
| 7     | 1.3  | 2.4  | 2.6   | 3.2  | 2.2  | 9.9   | 4.6   | 5.7   | 11    | 2.8   | 2.1   | 2.6   |
| 8     | 1.3  | 2.1  | 2.5   | 3.3  | 2.4  | 9.6   | 4.5   | 5.6   | 10    | 2.5   | 3.6   | 2.6   |
| 9     | 1.3  | 1.9  | 2.4   | 4.3  | 2.2  | 7.5   | 6.0   | 5.7   | 3.7   | 2.5   | 3.3   | 2.5   |
| 10    | 1.4  | 2.1  | 2.3   | 3.6  | 4.0  | 6.1   | 12    | 6.5   | 4.1   | 2.6   | 7.1   | 4.8   |
| 11    | 1.4  | 2.1  | 2.4   | 3.4  | 3.5  | 4.7   | 10    | 6.1   | 3.3   | 2.0   | 3.0   | 3.1   |
| 12    | 1.4  | 2.7  | 3.3   | 3.2  | 3.2  | 4.6   | 11    | 5.2   | 2.7   | 1.7   | 2.0   | 2.5   |
| 13    | 1.5  | 2.3  | 3.3   | 3.1  | 3.0  | 4.3   | 11    | 4.8   | 18    | 1.6   | 14    | 2.8   |
| 14    | 1.7  | 2.4  | 3.6   | 3.9  | 2.7  | 4.0   | 12    | 4.2   | 8.0   | 1.7   | 3.4   | 3.3   |
| 15    | 1.5  | 1.9  | 3.1   | 2.8  | 2.8  | 3.7   | 14    | 4.2   | 5.3   | 1.6   | 2.2   | 3.6   |
| 16    | 1.4  | 3.4  | 2.9   | 2.8  | 2.7  | 3.6   | 22    | 4.2   | 4.0   | 1.4   | 1.7   | 4.0   |
| 17    | 1.4  | 4.7  | 2.7   | 2.7  | 2.5  | 3.5   | 13    | 4.3   | 3.6   | 1.4   | 1.5   | 2.9   |
| 18    | 3.7  | 2.7  | 2.5   | 2.6  | 2.6  | 3.5   | 11    | 4.2   | 4.2   | 6.5   | 5.2   | 2.8   |
| 19    | 2.4  | 2.2  | 3.8   | 2.6  | 2.6  | 3.4   | 11    | 4.1   | 3.4   | 3.2   | 3.9   | 3.6   |
| 20    | 2.2  | 2.8  | 2.9   | 2.5  | 2.2  | 3.2   | 14    | 3.9   | 2.9   | 2.1   | 3.1   | 3.7   |
| 21    | 4.4  | 3.0  | 2.3   | 2.5  | 2.3  | 3.1   | 16    | 3.5   | 2.6   | 1.9   | 2.1   | 3.0   |
| 22    | 3.2  | 2.3  | 2.2   | 2.5  | 2.3  | 3.1   | 22    | 3.4   | 2.5   | 1.7   | 1.8   | 2.5   |
| 23    | 2.6  | 2.1  | 2.2   | 2.2  | 2.3  | 3.1   | 13    | 3.3   | 2.5   | 1.6   | 1.9   | 2.3   |
| 24    | 2.1  | 2.2  | 2.7   | 2.3  | 2.3  | 2.9   | 11    | 3.1   | 3.7   | 1.5   | 1.7   | 5.4   |
| 25    | 2.0  | 2.1  | 9.0   | 2.3  | 2.9  | 2.9   | 10    | 2.9   | 2.6   | 1.5   | 1.6   | 17    |
| 26    | 2.1  | 15   | 15    | 2.4  | 5.5  | 2.9   | 11    | 2.7   | 2.2   | 1.4   | 2.9   | 5.2   |
| 27    | 1.8  | 9.5  | 11    | 2.6  | 3.1  | 2.8   | 12    | 2.6   | 2.0   | 1.1   | 7.3   | 4.1   |
| 28    | 1.8  | 4.4  | 6.1   | 2.6  | 2.6  | 2.8   | 11    | 2.6   | 1.8   | .91   | 7.4   | 3.7   |
| 29    | 1.8  | 4.5  | 5.1   | 2.5  | 2.6  | 2.6   | 10    | 2.5   | 1.7   | .88   | 4.7   | 3.6   |
| 30    | 3.1  | 3.5  | 4.9   | 5.3  | 2.6  | 2.6   | 9.9   | 2.4   | 1.6   | .93   | 3.5   | 3.4   |
| 31    | 2.1  |      | 4.4   | 3.3  | 2.6  | 2.6   |       | 2.6   |       | 1.1   | 2.8   |       |
| TOTAL | 60.1 | 98.7 | 122.8 | 96.4 | 84.7 | 130.4 | 300.2 | 145.0 | 120.3 | 64.68 | 100.7 | 135.4 |
| MEAN  | 1.94 | 3.29 | 3.96  | 3.11 | 3.02 | 4.21  | 10.0  | 4.68  | 4.01  | 2.09  | 3.25  | 4.51  |
| MAX   | 4.4  | 15   | 15    | 5.3  | 5.4  | 9.6   | 22    | 9.0   | 18    | 6.5   | 14    | 17    |
| MIN   | 1.3  | 1.8  | 2.2   | 2.2  | 2.0  | 2.6   | 2.6   | 2.4   | 1.6   | .88   | 1.1   | 2.3   |
| CFSM  | .60  | 1.01 | 1.22  | .96  | .93  | 1.29  | 3.03  | 1.44  | 1.23  | .64   | 1.00  | 1.39  |
| IN.   | .69  | 1.13 | 1.41  | 1.10 | .97  | 1.49  | 3.44  | 1.66  | 1.38  | .74   | 1.15  | 1.56  |

WATER YEAR 1965 TOTAL 1459.98 MEAN 4.00 MAX 22. MIN 0.88 CFSM 1.23 IN. 16.71

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB  | MAR   | APR   | MAY   | JUN   | JUL  | AUG  | SEP  |
|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|------|------|------|
| 1     | 9.3   | 6.9   | 5.9   | 7.7   | 2.6  | 7.5   | 7.4   | 19    | 5.4   | 2.2  | 1.2  | 1.4  |
| 2     | 8.7   | 5.3   | 5.9   | 5.8   | 2.6  | 6.6   | 7.1   | 14    | 5.0   | 2.0  | 1.4  | 1.3  |
| 3     | 6.7   | 5.3   | 5.8   | 4.7   | 2.5  | 4.1   | 6.9   | 13    | 4.7   | 1.9  | 2.0  | 1.4  |
| 4     | 8.1   | 6.2   | 9.0   | 4.1   | 2.6  | 6.7   | 6.7   | 15    | 4.5   | 1.9  | 1.4  | 4.2  |
| 5     | 5.5   | 5.1   | 7.9   | 4.3   | 2.6  | 12    | 6.7   | 13    | 5.0   | 1.9  | 1.3  | 2.6  |
| 6     | 5.2   | 5.0   | 6.2   | 4.2   | 2.6  | 12    | 7.2   | 17    | 7.4   | 1.8  | 1.1  | 1.8  |
| 7     | 5.0   | 5.0   | 5.3   | 4.1   | 2.5  | 6.6   | 8.1   | 15    | 4.9   | 2.3  | 1.0  | 1.6  |
| 8     | 11    | 7.8   | 5.7   | 3.8   | 2.5  | 4.2   | 9.0   | 11    | 5.7   | 1.9  | 1.5  | 1.4  |
| 9     | 8.6   | 14    | 5.0   | 3.7   | 2.5  | 3.3   | 8.7   | 14    | 5.0   | 1.8  | 1.2  | 1.3  |
| 10    | 6.2   | 6.5   | 5.1   | 3.9   | 2.5  | 3.2   | 9.0   | 14    | 16    | 1.9  | 1.2  | 1.2  |
| 11    | 5.5   | 6.0   | 4.9   | 3.6   | 5.8  | 2.8   | 9.9   | 12    | 8.3   | 2.7  | 1.5  | 1.1  |
| 12    | 8.0   | 5.7   | 4.7   | 3.4   | 5.1  | 2.6   | 10    | 12    | 5.5   | 2.6  | 1.7  | 1.1  |
| 13    | 6.6   | 6.8   | 4.5   | 3.4   | 4.1  | 2.6   | 10    | 20    | 4.6   | 2.2  | 1.4  | 1.2  |
| 14    | 5.5   | 6.6   | 4.8   | 3.4   | 4.7  | 2.8   | 16    | 13    | 4.4   | 1.6  | 1.2  | 1.3  |
| 15    | 8.5   | 5.6   | 4.9   | 3.3   | 2.3  | 2.8   | 20    | 11    | 5.2   | 1.5  | 1.3  | 1.5  |
| 16    | 10    | 8.3   | 4.9   | 3.3   | 3.1  | 2.6   | 20    | 10    | 8.0   | 1.4  | 2.1  | 1.4  |
| 17    | 6.6   | 27    | 4.8   | 3.2   | 3.1  | 3.5   | 24    | 10    | 6.2   | 1.3  | 6.0  | 1.2  |
| 18    | 5.9   | 11    | 4.6   | 3.2   | 3.1  | 5.0   | 25    | 9.9   | 4.3   | 1.4  | 1.8  | 1.2  |
| 19    | 5.6   | 8.8   | 4.1   | 3.2   | 2.9  | 5.8   | 26    | 35    | 3.8   | 1.9  | 2.7  | 1.3  |
| 20    | 5.1   | 8.1   | 4.1   | 3.2   | 2.8  | 6.2   | 21    | 20    | 3.5   | 2.4  | 1.2  | 1.2  |
| 21    | 4.8   | 7.9   | 6.7   | 3.2   | 2.6  | 6.9   | 31    | 14    | 3.4   | 1.5  | 1.2  | 1.1  |
| 22    | 4.9   | 7.9   | 4.4   | 3.3   | 2.6  | 7.3   | 38    | 11    | 2.9   | 1.6  | 1.7  | 6.8  |
| 23    | 12    | 7.8   | 4.0   | 3.3   | 2.6  | 9.6   | 29    | 9.8   | 2.7   | 1.5  | 3.7  | 6.5  |
| 24    | 8.8   | 7.2   | 4.0   | 3.2   | 2.5  | 12    | 27    | 9.1   | 2.5   | 1.3  | 3.5  | 2.9  |
| 25    | 6.7   | 6.9   | 4.8   | 3.0   | 2.5  | 33    | 27    | 8.4   | 3.4   | 1.3  | 1.9  | 2.5  |
| 26    | 5.9   | 6.7   | 5.3   | 3.0   | 2.5  | 14    | 21    | 7.8   | 3.3   | 2.4  | 1.7  | 2.0  |
| 27    | 5.7   | 9.0   | 6.1   | 2.9   | 2.5  | 10    | 16    | 7.1   | 2.8   | 1.6  | 1.5  | 1.8  |
| 28    | 5.2   | 8.0   | 4.1   | 2.8   | 2.5  | 9.4   | 14    | 6.6   | 2.3   | 1.7  | 1.5  | 2.9  |
| 29    | 5.2   | 7.1   | 3.6   | 2.6   | 2.5  | 8.4   | 13    | 6.4   | 3.3   | 2.5  | 1.3  | 2.8  |
| 30    | 5.5   | 6.5   | 3.6   | 2.7   | 2.5  | 8.1   | 15    | 5.9   | 3.3   | 1.5  | 2.1  | 2.0  |
| 31    | 6.8   |       | 4.1   | 2.7   | 2.5  | 7.8   |       | 5.6   |       | 1.3  | 2.2  |      |
| TOTAL | 213.4 | 236.0 | 158.8 | 112.2 | 82.8 | 226.9 | 489.6 | 389.6 | 147.3 | 56.8 | 56.5 | 62.0 |
| MEAN  | 6.88  | 7.87  | 5.12  | 3.62  | 2.68 | 7.32  | 16.3  | 12.6  | 4.91  | 1.83 | 1.82 | 2.07 |
| MAX   | 12    | 27    | 9.0   | 7.7   | 5.8  | 33    | 38    | 35    | 16    | 2.7  | 6.0  | 6.8  |
| MIN   | 4.8   | 5.0   | 3.6   | 2.6   | 2.3  | 2.6   | 6.7   | 5.8   | 2.3   | 1.3  | 1.0  | 1.1  |
| CFSM  | 2.12  | 2.42  | 1.58  | 1.11  | .91  | 2.25  | 5.02  | 3.87  | 1.51  | .86  | .96  | .64  |
| IN.   | 2.44  | 2.70  | 1.82  | 1.28  | .95  | 2.60  | 5.60  | 4.46  | 1.69  | .65  | .65  | .71  |

WATER YEAR 1966 TOTAL 2231.90 MEAN 6.11 MAX 38. MIN 1.00 CFSM 1.88 IN. 25.54

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

LOCATION--LAT 44°28'35'', LONG 72°07'27'', 4.6 MI NORTH OF DANVILLE, CALEDONIA COUNTY.

DRAINAGE AREA--3.25 SQUARE MILES.

ELEVATION OF GAGE IS 1135 FT

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

| DAY   | OCT  | NOV  | DEC   | JAN  | FEB  | MAR  | APR   | MAY   | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|-------|------|------|------|-------|-------|-------|-------|------|------|
| 1     | 1.7  | 1.7  | 3.4   | 2.3  | 2.2  | 1.8  | 9.8   | 12    | 8.2   | 2.7   | 2.6  | 2.6  |
| 2     | 1.5  | 1.8  | 2.8   | 2.4  | 2.1  | 1.7  | 24    | 12    | 7.6   | 2.4   | 2.0  | 2.1  |
| 3     | 1.2  | 7.8  | 2.6   | 2.4  | 2.1  | 1.7  | 32    | 34    | 7.0   | 3.9   | 2.0  | 2.0  |
| 4     | 1.3  | 3.3  | 3.4   | 2.4  | 2.1  | 1.7  | 13    | 16    | 6.5   | 3.0   | 5.3  | 1.9  |
| 5     | 1.6  | 2.5  | 2.0   | 2.4  | 2.1  | 1.8  | 11    | 16    | 6.0   | 2.5   | 3.5  | 2.1  |
| 6     | 2.0  | 2.5  | 2.2   | 2.3  | 2.1  | 1.8  | 11    | 12    | 5.4   | 2.5   | 2.3  | 1.8  |
| 7     | 1.6  | 2.6  | 2.2   | 2.2  | 2.0  | 1.7  | 8.6   | 11    | 5.0   | 2.2   | 2.1  | 1.5  |
| 8     | 1.4  | 2.8  | 4.6   | 2.3  | 1.9  | 1.7  | 7.8   | 14    | 6.3   | 2.1   | 1.8  | 1.5  |
| 9     | 1.3  | 2.6  | 6.4   | 2.4  | 2.0  | 1.8  | 10    | 14    | 7.2   | 2.3   | 1.9  | 1.5  |
| 10    | 1.7  | 2.4  | 7.3   | 2.3  | 2.0  | 2.0  | 27    | 15    | 5.3   | 4.4   | 2.4  | 4.9  |
| 11    | 1.9  | 5.2  | 11    | 2.3  | 1.9  | 2.5  | 13    | 13    | 8.1   | 2.4   | 1.9  | 2.3  |
| 12    | 1.9  | 3.1  | 4.7   | 2.3  | 1.9  | 2.5  | 10    | 15    | 8.1   | 1.8   | 1.8  | 1.9  |
| 13    | 1.7  | 2.5  | 3.6   | 2.2  | 2.0  | 2.2  | 11    | 10    | 6.2   | 3.7   | 1.6  | 1.7  |
| 14    | 1.6  | 2.2  | 3.7   | 2.2  | 1.9  | 2.1  | 15    | 9.1   | 5.8   | 2.5   | 1.7  | 1.6  |
| 15    | 1.5  | 2.4  | 2.8   | 2.2  | 1.9  | 2.0  | 21    | 11    | 10    | 2.2   | 1.7  | 1.5  |
| 16    | 2.9  | 2.2  | 2.9   | 2.2  | 2.3  | 2.0  | 18    | 11    | 7.3   | 7.7   | 1.7  | 1.4  |
| 17    | 1.6  | 2.4  | 3.0   | 2.2  | 2.0  | 2.1  | 15    | 9.4   | 6.0   | 4.3   | 1.5  | 1.4  |
| 18    | 1.5  | 3.7  | 3.2   | 2.0  | 2.0  | 2.0  | 18    | 16    | 7.0   | 2.9   | 1.5  | 1.4  |
| 19    | 1.6  | 3.1  | 2.2   | 2.0  | 2.0  | 1.8  | 14    | 23    | 4.4   | 2.5   | 1.3  | 1.3  |
| 20    | 8.5  | 2.2  | 2.3   | 2.1  | 1.9  | 1.8  | 16    | 20    | 4.1   | 2.5   | 2.1  | 1.2  |
| 21    | 3.8  | 2.0  | 2.2   | 2.1  | 1.9  | 1.7  | 15    | 13    | 4.2   | 2.7   | 1.8  | 1.3  |
| 22    | 2.7  | 2.0  | 2.1   | 2.1  | 1.9  | 1.7  | 21    | 11    | 6.7   | 3.6   | 1.6  | 2.9  |
| 23    | 1.9  | 2.0  | 2.2   | 2.2  | 1.9  | 1.7  | 24    | 13    | 5.4   | 2.6   | 1.6  | 1.9  |
| 24    | 1.8  | 2.2  | 3.4   | 2.9  | 1.9  | 1.7  | 18    | 9.7   | 4.3   | 4.0   | 1.4  | 1.9  |
| 25    | 1.8  | 2.7  | 3.3   | 2.7  | 1.7  | 1.7  | 15    | 19    | 4.2   | 4.9   | 1.3  | 4.0  |
| 26    | 1.7  | 3.6  | 2.4   | 2.5  | 1.7  | 1.9  | 14    | 28    | 4.2   | 4.0   | 1.3  | 2.2  |
| 27    | 1.6  | 3.0  | 2.3   | 2.4  | 1.8  | 2.5  | 14    | 17    | 3.3   | 2.6   | 2.3  | 1.8  |
| 28    | 1.6  | 2.9  | 2.3   | 2.5  | 1.9  | 3.7  | 13    | 13    | 2.9   | 3.4   | 2.4  | 1.6  |
| 29    | 1.7  | 3.0  | 2.5   | 2.3  |      | 4.0  | 13    | 11    | 2.7   | 3.1   | 2.2  | 2.1  |
| 30    | 1.6  | 3.7  | 2.4   | 2.4  |      | 4.5  | 12    | 9.6   | 2.7   | 2.3   | 1.8  | 4.2  |
| 31    | 1.5  | 2.3  | 2.2   | 2.2  |      | 5.5  |       | 9.0   |       | 2.4   | 4.8  |      |
| TOTAL | 62.0 | 86.6 | 103.5 | 72.4 | 55.1 | 69.3 | 464.2 | 446.8 | 175.0 | 102.4 | 70.2 | 61.5 |
| MEAN  | 2.00 | 2.89 | 3.34  | 2.34 | 1.97 | 2.24 | 15.3  | 14.3  | 5.83  | 3.30  | 2.27 | 2.05 |
| MAX   | 8.5  | 7.8  | 11    | 3.2  | 2.3  | 3.7  | 32    | 34    | 11    | 8.1   | 5.3  | 4.9  |
| MIN   | 1.2  | 1.7  | 2.0   | 2.0  | 1.7  | 1.7  | 7.8   | 9.0   | 2.7   | 2.1   | 1.3  | 1.2  |
| CFSM  | .62  | .89  | 1.03  | .83  | .61  | .69  | 4.76  | 4.43  | 1.79  | 1.07  | .81  | .63  |
| IN.   | .71  | .99  | 1.18  | .83  | .63  | .79  | 5.31  | 5.11  | 2.00  | 1.12  | .81  | .70  |

WATER YEAR 1967 TOTAL 1769.30 MEAN 4.85 MAX 34. MIN 1.20 CFSM 1.49 IN. 20.25

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB  | MAR   | APR   | MAY   | JUN   | JUL  | AUG  | SEP  |
|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|------|------|------|
| 1     | 2.3   | 4.1   | 3.1   | 3.9   | 2.9  | 2.5   | 36    | 8.8   | 4.7   | 7.7  | 1.8  | 1.4  |
| 2     | 3.1   | 4.0   | 3.1   | 4.2   | 3.6  | 2.5   | 21    | 8.0   | 4.6   | 4.5  | 1.8  | 1.3  |
| 3     | 2.1   | 7.9   | 4.6   | 4.2   | 8.3  | 2.4   | 21    | 7.8   | 4.6   | 3.7  | 1.6  | 1.4  |
| 4     | 1.9   | 6.7   | 4.4   | 3.9   | 4.4  | 2.4   | 24    | 8.9   | 4.1   | 3.4  | 1.5  | 1.3  |
| 5     | 2.5   | 6.3   | 3.9   | 3.8   | 3.9  | 2.4   | 37    | 7.3   | 3.7   | 3.1  | 1.5  | 1.4  |
| 6     | 3.5   | 4.9   | 3.6   | 3.6   | 3.7  | 2.3   | 21    | 6.6   | 3.4   | 4.2  | 1.5  | 2.0  |
| 7     | 2.3   | 4.6   | 3.5   | 3.4   | 3.4  | 2.3   | 19    | 6.0   | 3.3   | 3.5  | 1.7  | 2.1  |
| 8     | 2.1   | 4.3   | 3.6   | 3.3   | 3.3  | 2.4   | 20    | 5.9   | 3.1   | 3.0  | 1.5  | 1.5  |
| 9     | 2.1   | 4.1   | 3.6   | 3.4   | 3.2  | 2.4   | 20    | 6.1   | 2.7   | 2.7  | 1.8  | 1.3  |
| 10    | 9.7   | 4.2   | 3.6   | 3.3   | 3.8  | 2.4   | 18    | 7.2   | 13    | 9.7  | 2.0  | 1.3  |
| 11    | 14    | 3.9   | 3.6   | 3.3   | 3.2  | 2.4   | 16    | 5.7   | 5.8   | 4.5  | 1.5  | 9.6  |
| 12    | 4.3   | 4.7   | 29    | 3.3   | 3.1  | 2.4   | 15    | 6.0   | 5.2   | 3.4  | 1.3  | 6.2  |
| 13    | 3.3   | 6.1   | 16    | 3.2   | 2.9  | 2.4   | 15    | 5.6   | 5.4   | 2.9  | 1.3  | 3.3  |
| 14    | 2.9   | 4.7   | 8.9   | 3.2   | 2.8  | 2.4   | 14    | 4.9   | 4.5   | 2.9  | 1.2  | 2.3  |
| 15    | 3.0   | 4.2   | 6.9   | 3.1   | 2.7  | 2.3   | 16    | 4.6   | 6.4   | 2.6  | 1.2  | 1.9  |
| 16    | 2.8   | 4.4   | 6.9   | 3.1   | 2.7  | 2.8   | 16    | 4.3   | 6.5   | 2.2  | 1.3  | 1.7  |
| 17    | 2.8   | 6.7   | 7.4   | 3.0   | 2.9  | 11    | 11    | 12    | 5.0   | 4.3  | 2.3  | 1.6  |
| 18    | 12    | 4.3   | 6.7   | 3.0   | 2.4  | 9.3   | 10    | 8.6   | 4.6   | 3.7  | 2.2  | 1.5  |
| 19    | 14    | 4.3   | 6.7   | 2.9   | 2.6  | 13    | 9.4   | 15    | 4.9   | 2.8  | 1.6  | 1.4  |
| 20    | 5.7   | 4.1   | 6.6   | 2.9   | 2.5  | 14    | 8.7   | 20    | 6.7   | 2.5  | 4.9  | 1.3  |
| 21    | 4.8   | 3.9   | 5.5   | 2.9   | 2.4  | 15    | 8.0   | 12    | 4.7   | 2.1  | 4.6  | 1.3  |
| 22    | 4.4   | 4.3   | 6.1   | 3.0   | 2.4  | 26    | 7.8   | 8     | 4.6   | 2.0  | 2.1  | 1.2  |
| 23    | 3.9   | 7.1   | 9.5   | 3.2   | 2.9  | 27    | 7.2   | 7     | 4.9   | 1.8  | 1.9  | 1.1  |
| 24    | 3.9   | 7.0   | 4.3   | 3.1   | 2.3  | 26    | 19    | 6     | 5.6   | 2.0  | 1.9  | 1.1  |
| 25    | 3.9   | 5.1   | 5.2   | 3.0   | 2.3  | 14    | 37    | 6.0   | 6.5   | 1.9  | 4.9  | 2.5  |
| 26    | 16    | 4.9   | 4.3   | 2.8   | 2.3  | 13    | 14    | 5.5   | 5.0   | 1.7  | 2.5  | 1.9  |
| 27    | 6.5   | 4.8   | 4.4   | 2.8   | 2.3  | 16    | 16    | 5.0   | 4.6   | 1.6  | 1.7  | 1.5  |
| 28    | 5.4   | 4.6   | 4.2   | 2.8   | 2.4  | 18    | 10    | 5.0   | 5.0   | 1.6  | 1.6  | 1.4  |
| 29    | 4.4   | 4.2   | 4.4   | 3.0   | 2.4  | 24    | 9.4   | 5.4   | 3.3   | 2.8  | 1.5  | 1.4  |
| 30    | 4.4   | 3.1   | 4.2   | 2.9   |      | 27    |       | 5.9   | 10    | 1.8  | 1.4  | 1.4  |
| 31    | 4.2   |       | 4.2   |       |      |       |       | 5.9   |       | 1.7  |      |      |
| TOTAL | 158.9 | 147.5 | 184.2 | 100.7 | 89.2 | 317.0 | 509.5 | 231.1 | 166.9 | 98.2 | 61.9 | 60.8 |
| MEAN  | 5.13  | 4.92  | 5.94  | 3.25  | 2.88 | 10.22 | 17.0  | 7.45  | 5.56  | 3.17 | 1.97 | 2.03 |
| MAX   | 11    | 7.9   | 16    | 4.2   | 8.3  | 32    | 37    | 13    | 11    | 9.7  | 5.3  | 9.6  |
| MIN   | 1.8   | 3.1   | 2.5   | 2.8   | 2.3  | 2.3   | 7.2   | 4.3   | 3.1   | 1.6  | 1.2  | 1.2  |
| CFSM  | 1.58  | 1.51  | 1.83  | 1.00  | .95  | 3.15  | 5.23  | 2.39  | 1.71  | .97  | .61  | .63  |
| IN.   | 1.82  | 1.69  | 2.11  | 1.15  | 1.02 | 3.63  | 5.83  | 2.64  | 1.91  | 1.12 | .70  | .70  |

WATER YEAR 1968 TOTAL 2125.00 MEAN 5.81 MAX 37. MIN 1.20 CFSM 1.79 IN. 24.32



## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

LOCATION--LAT 44°28'35'', LONG 72°07'27'', 4.6 MI NORTH OF DANVILLE, CALEDONIA COUNTY.

DRAINAGE AREA--3.25 SQUARE MILES.

ELEVATION OF GAGE IS 1135 FT

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB  | MAR  | APR   | MAY   | JUN   | JUL   | AUG   | SEP  |
|-------|------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|------|
| 1     | 1.5  | 2.2   | 4.9   | 3.4   | 3.3  | 2.7  | 3.2   | 35    | 5.7   | 3.1   | 2.7   | 1.6  |
| 2     | 1.4  | 2.5   | 4.8   | 3.3   | 3.2  | 2.8  | 3.9   | 33    | 5.4   | 3.7   | 4.2   | 1.6  |
| 3     | 1.5  | 2.2   | 4.5   | 3.3   | 3.2  | 2.7  | 3.8   | 34    | 8.1   | 3.0   | 3.9   | 1.6  |
| 4     | 3.0  | 2.1   | 4.9   | 3.2   | 3.2  | 2.6  | 4.4   | 29    | 5.0   | 3.0   | 2.4   | 1.6  |
| 5     | 5.0  | 2.1   | 8.1   | 3.1   | 3.1  | 2.6  | 6.8   | 24    | 5.0   | 3.0   | 25    | 1.5  |
| 6     | 2.5  | 2.1   | 5.4   | 3.1   | 3.0  | 2.5  | 8.8   | 20    | 5.9   | 3.0   | 9.5   | 2.9  |
| 7     | 4.5  | 2.1   | 4.8   | 3.3   | 2.9  | 2.5  | 10    | 18    | 6.0   | 2.5   | 8.2   | 6.0  |
| 8     | 3.7  | 3.1   | 4.9   | 3.2   | 3.1  | 2.5  | 10    | 21    | 4.8   | 4.4   | 6.6   | 4.7  |
| 9     | 2.6  | 2.8   | 4.1   | 3.0   | 3.0  | 2.7  | 11    | 30    | 4.8   | 2.2   | 6.5   | 4.3  |
| 10    | 2.2  | 2.8   | 4.2   | 3.0   | 3.8  | 2.5  | 23    | 21    | 4.6   | 2.4   | 9.0   | 2.8  |
| 11    | 2.3  | 2.7   | 4.0   | 3.0   | 2.8  | 2.5  | 25    | 26    | 4.2   | 3.1   | 7.5   | 2.4  |
| 12    | 2.2  | 2.5   | 4.0   | 2.9   | 2.9  | 2.5  | 13    | 19    | 3.9   | 4.1   | 4.4   | 2.2  |
| 13    | 2.0  | 2.6   | 4.0   | 3.0   | 2.9  | 2.5  | 23    | 18    | 7.0   | 3.8   | 3.8   | 1.9  |
| 14    | 1.9  | 2.5   | 4.9   | 3.0   | 3.0  | 2.5  | 36    | 20    | 6.0   | 3.3   | 3.3   | 1.8  |
| 15    | 1.8  | 2.5   | 4.8   | 3.0   | 3.0  | 2.5  | 48    | 16    | 19    | 2.5   | 2.7   | 1.7  |
| 16    | 1.9  | 2.6   | 4.3   | 3.0   | 2.9  | 2.4  | 44    | 13    | 13    | 2.2   | 2.8   | 1.7  |
| 17    | 1.8  | 2.4   | 4.0   | 2.9   | 2.7  | 2.4  | 54    | 12    | 6.6   | 2.0   | 5.1   | 2.9  |
| 18    | 1.7  | 4.3   | 3.9   | 2.9   | 2.6  | 2.4  | 55    | 12    | 5.0   | 2.0   | 3.3   | 2.4  |
| 19    | 2.1  | 5.4   | 3.9   | 2.9   | 2.6  | 2.4  | 65    | 20    | 4.4   | 1.8   | 4.2   | 1.9  |
| 20    | 3.7  | 5.4   | 3.9   | 2.9   | 2.6  | 2.2  | 34    | 76    | 5.5   | 1.8   | 2.9   | 1.8  |
| 21    | 2.1  | 4.1   | 3.7   | 2.9   | 2.7  | 3.3  | 32    | 31    | 4.6   | 1.9   | 2.4   | 1.7  |
| 22    | 2.0  | 3.8   | 3.6   | 2.8   | 2.8  | 3.1  | 31    | 20    | 3.9   | 1.9   | 2.2   | 1.6  |
| 23    | 1.9  | 3.5   | 3.9   | 2.8   | 2.8  | 4.4  | 44    | 16    | 6.6   | 2.8   | 2.1   | 1.6  |
| 24    | 1.8  | 3.6   | 3.8   | 3.4   | 3.0  | 3.4  | 34    | 15    | 5.5   | 2.2   | 2.2   | 1.6  |
| 25    | 2.6  | 5.6   | 3.7   | 7.1   | 3.0  | 6.0  | 35    | 14    | 5.6   | 2.0   | 2.4   | 1.9  |
| 26    | 2.5  | 4.0   | 3.4   | 4.4   | 2.8  | 6.6  | 33    | 14    | 4.6   | 4.6   | 2.4   | 1.7  |
| 27    | 4.0  | 3.3   | 3.3   | 4.0   | 2.7  | 5.0  | 40    | 11    | 5.2   | 5.1   | 2.0   | 1.8  |
| 28    | 4.0  | 3.3   | 3.5   | 4.7   | 2.8  | 5.7  | 57    | 10    | 6.1   | 8.2   | 1.8   | 1.7  |
| 29    | 4.1  | 17    | 3.3   | 6.6   | 2.8  | 5.5  | 55    | 8.2   | 3.9   | 2.9   | 1.8   | 1.6  |
| 30    | 2.8  | 6.6   | 3.3   | 4.2   | 2.5  | 3.1  | 38    | 7.6   | 3.5   | 11    | 1.8   | 1.6  |
| 31    | 2.4  | 3.3   | 3.3   | 3.5   | 3.5  | 3.5  | 3.5   | 6.5   | 13    | 1.7   | 1.7   | 1.6  |
| TOTAL | 77.5 | 120.9 | 131.6 | 102.6 | 81.1 | 99.4 | 885.2 | 650.3 | 179.4 | 144.2 | 140.8 | 66.1 |
| MEAN  | 2.5  | 4.0   | 4.2   | 3.3   | 2.6  | 3.2  | 29.5  | 21.0  | 5.8   | 4.6   | 4.5   | 2.1  |
| MAX   | 5.0  | 17    | 8.1   | 7.1   | 3.3  | 6.6  | 65    | 76    | 19    | 8.2   | 5.1   | 6.0  |
| MIN   | 1.4  | 2.1   | 3.3   | 2.8   | 2.8  | 2.4  | 3.1   | 6.4   | 3.5   | 1.8   | 1.7   | 1.5  |
| CFSM  | .77  | 1.24  | 1.31  | 1.02  | .89  | .99  | 9.09  | 6.45  | 1.84  | 1.43  | 1.40  | .68  |
| IN.   | .89  | 1.38  | 1.51  | 1.17  | .93  | 1.14 | 10.1  | 7.44  | 2.05  | 1.65  | 1.61  | .76  |

WATER YEAR 1969 TOTAL 2679.80 MEAN 7.34 MAX 76. MIN 1.40 CFSM 2.26 IN. 30.66

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG   | SEP  |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|
| 1     | 1.6  | 2.2   | 4.8   | 4.4   | 3.3   | 3.3   | 3.2   | 20    | 4.6   | 5.5  | 1.7   | 1.3  |
| 2     | 1.6  | 4     | 4.0   | 4.4   | 3.2   | 3.3   | 1.9   | 17    | 4.4   | 3.5  | 1.5   | 1.2  |
| 3     | 3.6  | 4     | 4.0   | 4.4   | 3.2   | 3.3   | 1.9   | 20    | 4.4   | 3.5  | 1.5   | 1.2  |
| 4     | 1.4  | 1.9   | 4.0   | 4.0   | 3.2   | 3.3   | 4.1   | 13    | 3.5   | 4.4  | 1.5   | 1.2  |
| 5     | 1.7  | 1.9   | 4.0   | 4.0   | 3.2   | 3.3   | 4.1   | 13    | 3.5   | 4.4  | 1.5   | 1.2  |
| 6     | 1.5  | 1.2   | 3.9   | 4.0   | 5.2   | 3.2   | 4.1   | 15    | 14    | 2.8  | 1.2   | 2.3  |
| 7     | 1.6  | 3.8   | 4.1   | 4.0   | 4.4   | 3.3   | 4.4   | 13    | 5.6   | 2.3  | 1.2   | 1.8  |
| 8     | 1.6  | 3.8   | 4.1   | 4.0   | 4.4   | 3.3   | 4.4   | 11    | 5.6   | 2.3  | 1.2   | 1.8  |
| 9     | 1.6  | 3.8   | 4.1   | 4.0   | 4.4   | 3.3   | 4.4   | 19.9  | 5.6   | 2.3  | 1.2   | 1.8  |
| 10    | 1.6  | 3.8   | 4.1   | 4.0   | 4.4   | 3.3   | 4.4   | 12.9  | 5.6   | 2.3  | 1.2   | 1.8  |
| 11    | 1.4  | 6.6   | 23    | 3.4   | 7.3   | 3.1   | 7.2   | 13    | 3.4   | 2.1  | 1.1   | 1.7  |
| 12    | 1.4  | 11    | 7.5   | 3.4   | 4.4   | 3.0   | 7.7   | 11    | 3.4   | 1.7  | 1.1   | 1.3  |
| 13    | 1.4  | 9.9   | 7.5   | 3.4   | 4.4   | 3.0   | 11    | 9.1   | 3.4   | 1.6  | 1.1   | 1.2  |
| 14    | 1.7  | 9.9   | 7.5   | 3.4   | 4.4   | 3.0   | 16    | 8.3   | 3.4   | 1.6  | 1.0   | 1.2  |
| 15    | 1.6  | 9.7   | 9.8   | 3.4   | 4.4   | 3.0   | 21    | 7.5   | 2.5   | 1.6  | .99   | 1.2  |
| 16    | 1.6  | 6.4   | 5.3   | 3.3   | 4.2   | 2.8   | 24    | 7.1   | 2.5   | 1.9  | .97   | 2.0  |
| 17    | 1.6  | 5.9   | 4.8   | 3.3   | 4.2   | 2.8   | 38    | 21    | 2.5   | 1.7  | .91   | 1.5  |
| 18    | 1.9  | 5.9   | 4.4   | 3.3   | 4.2   | 2.8   | 42    | 12    | 2.7   | 1.7  | .84   | 1.4  |
| 19    | 1.7  | 5.9   | 4.4   | 3.3   | 4.2   | 2.8   | 28    | 8.9   | 2.4   | 2.2  | .79   | 1.4  |
| 20    | 5.0  | 17    | 5.0   | 3.2   | 3.8   | 3.6   | 22    | 7.9   | 2.2   | 1.7  | .88   | 1.2  |
| 21    | 5.4  | 7.8   | 5.1   | 3.0   | 3.6   | 3.6   | 23    | 6.8   | 2.2   | 1.6  | 1.5   | 1.2  |
| 22    | 3.0  | 5.8   | 4.7   | 3.0   | 3.6   | 3.6   | 26    | 8.7   | 2.3   | 1.4  | 1.0   | 1.7  |
| 23    | 3.7  | 5.8   | 4.7   | 3.0   | 3.6   | 3.6   | 24    | 8.1   | 2.1   | 1.3  | 3.1   | 1.4  |
| 24    | 3.5  | 5.8   | 4.7   | 3.0   | 3.6   | 3.6   | 55    | 6.3   | 2.0   | 1.3  | 2.0   | 1.2  |
| 25    | 5.1  | 5.8   | 5.2   | 2.9   | 3.4   | 3.4   | 47    | 6.4   | 2.0   | 1.3  | 1.3   | 1.2  |
| 26    | 4.2  | 5.2   | 4.6   | 2.9   | 3.3   | 3.2   | 40    | 9.3   | 1.9   | 1.3  | 1.1   | 2.3  |
| 27    | 3.1  | 4.1   | 10.6  | 3.0   | 3.3   | 3.4   | 46    | 7.8   | 1.9   | 1.2  | 1.3   | 2.3  |
| 28    | 3.5  | 4.1   | 10.6  | 3.0   | 3.3   | 3.4   | 39    | 5.9   | 3.0   | 1.2  | 5.3   | 2.0  |
| 29    | 3.5  | 4.1   | 10.6  | 3.0   | 3.3   | 3.4   | 30    | 5.1   | 3.0   | 1.2  | 3.7   | 2.1  |
| 30    | 3.5  | 4.1   | 10.6  | 3.0   | 3.3   | 3.4   | 24    | 4.7   | 12    | 1.2  | 1.5   | 1.8  |
| 31    | 2.2  | 4.7   | 4.7   | 3.8   | 3.2   | 3.2   | 3.2   | 4.4   | 1.2   | 1.2  | 1.5   | 1.8  |
| TOTAL | 73.0 | 222.2 | 197.9 | 108.3 | 138.8 | 102.1 | 630.7 | 324.2 | 121.4 | 64.3 | 46.98 | 50.2 |
| MEAN  | 2.35 | 7.41  | 6.06  | 3.49  | 4.96  | 3.29  | 21.0  | 10.5  | 4.05  | 2.07 | 1.52  | 1.67 |
| MAX   | 5.4  | 19    | 23    | 5.1   | 18    | 4.3   | 55    | 21    | 14    | 5.5  | 5.3   | 4.2  |
| MIN   | 1.4  | 2.2   | 3.9   | 2.9   | 3.3   | 2.8   | 3.2   | 4.4   | 1.2   | 1.2  | .79   | 1.2  |
| CFSM  | .72  | 2.28  | 1.87  | 1.07  | 1.53  | 1.01  | 6.47  | 3.22  | 1.25  | .64  | .47   | .51  |
| IN.   | .84  | 2.54  | 2.15  | 1.24  | 1.59  | 1.17  | 7.22  | 3.71  | 1.39  | .74  | .54   | .57  |

WATER YEAR 1970 TOTAL 2070.08 MEAN 5.67 MAX 55. MIN 0.79 CFSM 1.75 IN. 23.69



## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

LOCATION--LAT 44°28'35'', LONG 72°07'27'', 4.6 MI NORTH OF DANVILLE, CALEDONIA COUNTY.

DRAINAGE AREA--3.25 SQUARE MILES.

ELEVATION OF GAGE IS 1135 FT

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR   | MAY   | JUN   | JUL  | AUG   | SEP  |
|-------|------|------|------|------|------|------|-------|-------|-------|------|-------|------|
| 1     | 1.6  | 1.4  | 2.9  | 2.1  | 1.7  | 2.4  | 2.3   | 34    | 5.1   | 4.5  | 1.8   | 3.6  |
| 2     | 2.2  | 1.4  | 2.0  | 2.0  | 1.7  | 2.4  | 2.7   | 33    | 4.7   | 4.5  | 2.2   | 3.1  |
| 3     | 2.1  | 1.4  | 2.0  | 2.0  | 1.7  | 2.4  | 2.7   | 30    | 4.4   | 2.0  | 2.5   | 2.9  |
| 4     | 1.7  | 1.4  | 2.7  | 2.0  | 1.7  | 2.9  | 5.2   | 49    | 4.7   | 1.8  | 7.5   | 2.9  |
| 5     |      |      |      | 2.2  | 1.7  |      | 5.0   | 45    | 4.2   | 1.6  | 3.1   | 2.7  |
| 6     | 1.5  | 1.5  | 2.6  | 2.2  | 1.6  | 2.1  | 3.9   | 43    | 4.0   | 1.7  | 2.2   | 2.7  |
| 7     | 1.5  | 1.5  | 2.2  | 2.1  | 1.7  | 2.1  | 3.8   | 44    | 4.1   | 1.7  | 1.8   | 2.6  |
| 8     | 1.4  | 1.4  | 2.1  | 2.1  | 1.8  | 2.1  | 3.3   | 38    | 11    | 1.4  | 1.8   | 2.4  |
| 9     | 1.4  | 1.4  | 2.1  | 2.1  | 2.2  | 2.1  | 3.7   | 39    | 6.9   | 1.3  | 1.4   | 2.2  |
| 10    | 1.3  | 1.5  | 2.3  | 2.1  | 1.9  | 2.1  | 5.5   | 36    | 4.5   | 1.2  | 1.4   | 2.0  |
| 11    | 1.4  | 2.4  | 2.2  | 2.0  | 1.9  | 2.1  | 13    | 33    | 3.8   | 1.2  | 1.9   | 2.0  |
| 12    | 1.5  | 1.9  | 2.1  | 1.9  | 1.9  | 2.1  | 12    | 27    | 3.6   | 1.2  | 1.6   | 2.0  |
| 13    | 1.5  | 1.1  | 2.1  | 1.9  | 2.4  | 2.0  | 12    | 27    | 3.3   | 1.3  | 1.3   | 2.8  |
| 14    | 2.0  | 1.5  | 2.1  | 1.9  | 4.9  | 3.3  | 12    | 19    | 3.0   | 3.0  | 1.2   | 4.4  |
| 15    | 2.9  | 2.4  | 2.1  | 1.9  | 4.0  | 3.1  | 8.5   | 16    | 3.0   | 2.1  | 1.2   | 4.3  |
| 16    | 2.9  | 2.8  | 2.1  | 1.9  | 2.6  | 5.2  | 7.7   | 14    | 2.7   | 1.9  | 1.2   | 2.7  |
| 17    | 2.0  | 2.0  | 2.1  | 1.9  | 2.6  | 3.8  | 8.0   | 14    | 2.6   | 2.5  | 1.2   | 2.1  |
| 18    | 1.8  | 1.1  | 2.4  | 1.8  | 2.4  | 3.1  | 13    | 12    | 2.4   | 2.2  | 1.1   | 2.5  |
| 19    | 1.7  | 2.3  | 2.1  | 1.7  | 2.2  | 2.9  | 2.8   | 10    | 2.2   | 2.1  | 1.1   | 2.4  |
| 20    | 1.6  | 2.1  | 2.1  | 1.7  | 2.1  | 2.9  | 3.5   | 9.0   | 2.1   | 2.9  | 2.4   | 2.2  |
| 21    | 1.6  | 5.7  | 2.2  | 1.7  | 2.2  | 2.7  | 30    | 11    | 3.5   | 1.7  | 2.4   | 3.6  |
| 22    | 1.6  | 2.2  | 2.2  | 1.7  | 2.2  | 2.7  | 27    | 12    | 3.3   | 1.5  | 2.0   | 2.7  |
| 23    | 4.3  | 2.1  | 2.1  | 1.7  | 2.2  | 2.5  | 20    | 8.8   | 3.5   | 1.4  | 9.5   | 3.3  |
| 24    | 2.7  | 2.3  | 2.1  | 1.7  | 2.1  | 2.5  | 22    | 7.6   | 2.2   | 1.4  | 3.1   | 2.1  |
| 25    | 2.0  | 1.9  | 2.1  | 1.7  | 2.1  | 2.5  | 2.5   | 9.0   | 3.2   | 1.4  | 2.0   | 2.1  |
| 26    | 1.8  | 2.0  | 2.1  | 1.7  | 2.1  | 2.4  | 23    | 15    | 3.6   | 1.3  | 1.6   | 2.0  |
| 27    | 1.7  | 1.9  | 2.1  | 1.9  | 2.6  | 2.6  | 25    | 9.6   | 2.3   | 1.6  | 1.3   | 1.9  |
| 28    | 1.6  | 2.4  | 2.1  | 1.9  | 2.9  | 2.6  | 30    | 9.5   | 1.9   | 1.3  | 5.1   | 1.9  |
| 29    | 1.5  | 2.6  | 2.1  | 1.8  |      | 2.5  | 31    | 7.4   | 1.8   | 1.4  | 1.1   | 2.1  |
| 30    | 1.3  | 2.2  | 2.0  | 1.8  | 1.6  | 2.5  | 34    | 6.4   | 1.7   | 1.7  | 5.7   | 2.0  |
| 31    | 1.3  |      | 2.0  | 1.7  |      | 2.4  |       | 5.7   |       | 1.7  | 4.7   |      |
| TOTAL | 56.8 | 66.2 | 70.1 | 58.9 | 63.1 | 80.4 | 457.3 | 704.0 | 110.3 | 57.5 | 158.0 | 82.0 |
| MEAN  | 1.83 | 2.12 | 2.26 | 1.90 | 2.05 | 2.59 | 15.2  | 22.7  | 3.68  | 1.85 | 5.10  | 2.73 |
| MAX   | 4.3  | 5.7  | 3.2  | 2.2  | 4.9  | 5.2  | 35    | 60    | 11    | 4.5  | 5.1   | 5.0  |
| MIN   | 1.3  | 1.4  | 2.0  | 1.7  | 1.6  | 2.0  | 2.3   | 5.7   | 1.7   | 1.2  | 1.1   | 1.9  |
| CFSM  | .56  | .68  | .70  | .58  | .69  | .80  | 4.69  | 6.99  | 1.13  | .57  | 1.57  | .84  |
| IN.   | .65  | .76  | .80  | .67  | .72  | .92  | 5.23  | 8.06  | 1.26  | .66  | 1.81  | .94  |

WATER YEAR 1971 TOTAL 1964.80 MEAN 5.38 MAX 60. MIN 1.10 CFSM 1.66 IN. 22.48

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV  | DEC   | JAN  | FEB  | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP  |
|-------|------|------|-------|------|------|-------|-------|-------|-------|-------|-------|------|
| 1     | 1.8  | 2.2  | 2.5   | 2.7  | 2.2  | 2.4   | 5.5   | 51    | 12    | 5.1   | 3.8   | 1.9  |
| 2     | 1.9  | 2.8  | 2.6   | 2.8  | 2.2  | 3.7   | 6.0   | 59    | 7.9   | 3.9   | 3.5   | 1.7  |
| 3     | 2.1  | 2.8  | 2.6   | 2.8  | 2.2  | 5.4   | 5.8   | 78    | 5.7   | 12    | 9.1   | 1.7  |
| 4     | 1.9  | 2.6  | 2.6   | 2.8  | 2.2  | 3.8   | 5.1   | 85    | 7.9   | 7.7   | 5.6   | 1.6  |
| 5     |      |      | 4.2   | 2.8  | 2.2  | 3.0   | 5.1   | 63    | 7.1   | 4.7   | 4.0   | 1.6  |
| 6     | 2.1  | 2.3  | 2.6   | 2.6  | 2.2  | 2.8   | 5.2   | 49    | 7.6   | 3.9   | 3.5   | 1.5  |
| 7     | 2.3  | 2.0  | 2.5   | 2.6  | 2.2  | 2.8   | 4.7   | 57    | 8.4   | 3.8   | 4.6   | 1.4  |
| 8     | 2.1  | 2.2  | 2.5   | 2.6  | 2.2  | 2.8   | 4.9   | 41    | 5.9   | 3.5   | 5.7   | 1.8  |
| 9     | 2.1  | 2.6  | 2.8   | 2.6  | 2.1  | 2.6   | 5.0   | 33    | 7.6   | 3.3   | 3.1   | 2.0  |
| 10    |      |      |       |      |      |       |       | 27    |       | 13    |       | 1.5  |
| 11    | 8.1  | 2.5  | 6.0   | 2.9  | 2.1  | 2.4   | 5.3   | 24    | 6.6   | 11    | 3.3   | 1.5  |
| 12    | 3.9  | 2.3  | 4.3   | 2.8  | 2.1  | 2.4   | 6.4   | 21    | 4.8   | 4.9   | 3.2   | 1.5  |
| 13    | 3.6  | 2.3  | 3.6   | 3.0  | 2.1  | 2.4   | 6.5   | 21    | 4.4   | 4.0   | 3.0   | 1.6  |
| 14    | 3.0  | 2.3  | 3.4   | 3.3  | 2.4  | 2.5   | 6.5   | 20    | 4.1   | 3.9   | 2.5   | 1.8  |
| 15    | 2.7  | 2.3  | 3.4   | 3.7  | 2.4  | 2.5   | 6.5   | 23    | 5.4   | 3.5   | 2.5   | 1.6  |
| 16    | 2.5  | 2.3  | 6.7   | 3.1  | 2.5  | 2.6   | 9.4   | 19    | 13    | 4.1   | 2.2   | 1.4  |
| 17    | 2.5  | 2.1  | 4.7   | 2.9  | 2.5  | 7.0   | 13    | 15    | 5.6   | 11    | 2.3   | 1.4  |
| 18    | 2.5  | 2.4  | 3.7   | 2.8  | 2.5  | 13    | 13    | 14    | 4.5   | 4.3   | 3.4   | 1.4  |
| 19    | 2.5  | 4.0  | 3.5   | 2.8  | 2.2  | 4.9   | 22    | 12    | 4.3   | 4.1   | 2.3   | 1.4  |
| 20    |      |      |       |      |      | 4.8   | 18    | 12    | 4.2   | 3.8   | 2.3   | 1.3  |
| 21    | 2.1  | 3.0  | 3.1   | 2.6  | 2.1  | 4.2   | 16    | 11    | 4.0   | 24    | 2.0   | 1.3  |
| 22    | 2.2  | 2.2  | 2.9   | 2.4  | 2.1  | 4.0   | 17    | 9.3   | 3.6   | 10    | 1.1   | 1.3  |
| 23    | 2.1  | 2.3  | 2.9   | 2.8  | 2.1  | 3.7   | 18    | 3.1   | 3.3   | 5.8   | 1.1   | 1.3  |
| 24    | 3.0  | 2.1  | 5.2   | 3.6  | 2.0  | 4.9   | 19    | 7.4   | 4.3   | 6.7   | 2.0   | 1.3  |
| 25    |      |      |       |      |      |       |       | 6.4   | 4.0   | 10    | 6.4   | 1.3  |
| 26    | 3.6  | 2.6  | 3.5   | 3.2  | 2.0  | 4.5   | 17    | 6.1   | 4.5   | 8.0   | 3.6   | 1.4  |
| 27    | 2.6  | 2.5  | 3.2   | 2.8  | 2.0  | 4.1   | 15    | 5.1   | 3.7   | 6.5   | 2.6   | 1.4  |
| 28    | 2.6  | 2.5  | 3.1   | 2.8  | 2.1  | 4.1   | 10    | 5.4   | 1     | 5.7   | 2.6   | 1.2  |
| 29    | 2.3  | 2.9  | 2.9   | 2.4  |      | 4.7   | 41    | 4.4   | 8.0   | 4.8   | 2.6   | 1.4  |
| 30    |      |      |       |      |      | 4.7   |       | 5.2   | 3.4   | 4.4   | 2.1   | 3.5  |
| 31    |      |      |       |      |      | 4.7   |       |       |       | 4.0   |       |      |
| TOTAL | 88.9 | 78.4 | 108.7 | 88.2 | 63.2 | 132.6 | 372.4 | 798.8 | 192.4 | 205.5 | 108.1 | 47.1 |
| MEAN  | 2.87 | 2.51 | 3.51  | 2.85 | 2.01 | 4.38  | 12.4  | 25.8  | 6.41  | 6.24  | 3.49  | 1.57 |
| MAX   | 8.1  | 5.7  | 6.7   | 3.3  | 4.9  | 13    | 41    | 85    | 14    | 11    | 9.1   | 3.5  |
| MIN   | 1.8  | 2.1  | 2.5   | 2.3  | 2.0  | 2.3   | 4.7   | 4.4   | 3.6   | 3.3   | 1.8   | 1.2  |
| CFSM  | .88  | .80  | 1.08  | .88  | .67  | 1.32  | 3.82  | 7.93  | 1.97  | 2.04  | 1.07  | .48  |
| IN.   | 1.02 | .90  | 1.24  | 1.01 | .72  | 1.52  | 4.26  | 9.14  | 2.20  | 2.35  | 1.24  | .54  |

WATER YEAR 1972 TOTAL 2284.30 MEAN 6.24 MAX 85. MIN 1.20 CFSM 1.92 IN. 26.14

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

LOCATION--LAT 44°28'35'', LONG 72°07'27'', 4.6 MI NORTH OF DANVILLE, CALEDONIA COUNTY.

DRAINAGE AREA--3.25 SQUARE MILES.

ELEVATION OF GAGE IS 1135 FT

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

| DAY                                                                           | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------------------------------------------------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1                                                                             | 2.0  | 2.2   | 4.9   | 13    | 5.2   | 3.5   | 29    | 11    | 13    | 41    | 3.0   | 2.2   |
| 2                                                                             | 1.6  | 3.0   | 4.3   | 6.4   | 5.5   | 3.3   | 29    | 11    | 12    | 25    | 5.2   | 2.0   |
| 3                                                                             | 1.6  | 6.0   | 4.8   | 5.4   | 17    | 3.3   | 20    | 14    | 8.7   | 19    | 5.1   | 1.8   |
| 4                                                                             | 1.5  | 3.9   | 4.1   | 5.4   | 8.2   | 3.6   | 20    | 13    | 9.3   | 16    | 11    | 1.7   |
| 5                                                                             | 1.5  | 3.2   | 4.3   | 4.7   | 6.6   | 4.5   | 19    | 10    | 9.3   | 14    | 4.1   | 1.7   |
| 6                                                                             | 1.4  | 3.5   | 10    | 4.5   | 6.6   | 4.1   | 15    | 9.2   | 8.1   | 11    | 3.3   | 19    |
| 7                                                                             | 10   | 3.3   | 8.4   | 4.5   | 6.4   | 3.9   | 14    | 8.1   | 7.8   | 11    | 3.1   | 4.8   |
| 8                                                                             | 3.9  | 9.9   | 5.8   | 4.4   | 5.8   | 8.4   | 13    | 7.9   | 6.5   | 8.9   | 2.7   | 2.9   |
| 9                                                                             | 3.3  | 21    | 6.3   | 4.0   | 5.2   | 7.2   | 12    | 12    | 5.7   | 7.8   | 2.5   | 2.6   |
| 10                                                                            | 2.4  | 6.6   | 5.3   | 4.0   | 5.6   | 5.6   | 11    | 10    | 5.0   | 7.3   | 3.5   | 2.3   |
| 11                                                                            | 2.0  | 5.0   | 4.4   | 4.0   | 5.0   | 5.9   | 10    | 12    | 4.8   | 12    | 8.6   | 2.2   |
| 12                                                                            | 2.2  | 4.4   | 5.1   | 3.8   | 4.9   | 16    | 9.6   | 11    | 9.0   | 7.6   | 3.5   | 2.0   |
| 13                                                                            | 2.2  | 4.4   | 5.3   | 3.6   | 4.9   | 16    | 9.3   | 12    | 10    | 6.8   | 2.8   | 1.9   |
| 14                                                                            | 2.0  | 4.1   | 4.7   | 3.6   | 4.7   | 9.9   | 12.9  | 8.6   | 7.1   | 19    | 2.6   | 2.2   |
| 15                                                                            | 2.9  | 3.9   | 4.5   | 3.6   | 4.7   | 8.9   | 12    | 8.2   | 5.6   | 8.4   | 2.7   | 4.4   |
| 16                                                                            | 2.3  | 3.5   | 4.7   | 3.6   | 4.4   | 13    | 19    | 12    | 3.5   | 6.8   | 2.4   | 2.8   |
| 17                                                                            | 2.5  | 3.7   | 6.2   | 3.7   | 4.2   | 34    | 33    | 8.0   | 15    | 5.7   | 2.2   | 2.3   |
| 18                                                                            | 2.1  | 3.6   | 4.4   | 4.4   | 4.0   | 33    | 30    | 8.4   | 8.8   | 5.2   | 2.1   | 16    |
| 19                                                                            | 2.0  | 3.3   | 4.0   | 5.0   | 4.0   | 16    | 32    | 9.1   | 7.7   | 4.8   | 1.9   | 5.5   |
| 20                                                                            | 1.8  | 5.7   | 4.0   | 15    | 4.0   | 13    | 25    | 7.9   | 7.0   | 5.0   | 1.8   | 3.7   |
| 21                                                                            | 1.7  | 4.5   | 4.0   | 7.1   | 4.0   | 12    | 24    | 32    | 11    | 4.8   | 1.8   | 3.2   |
| 22                                                                            | 2.0  | 3.4   | 4.0   | 6.6   | 4.0   | 11    | 38    | 24    | 20    | 4.1   | 2.2   | 9.3   |
| 23                                                                            | 3.5  | 3.7   | 4.0   | 16    | 4.0   | 10    | 27    | 13    | 12    | 3.7   | 2.1   | 9.4   |
| 24                                                                            | 3.2  | 3.5   | 4.1   | 9.1   | 3.9   | 10    | 19    | 11    | 9.2   | 3.4   | 1.8   | 4.7   |
| 25                                                                            | 2.4  | 3.4   | 4.2   | 7.0   | 3.7   | 12    | 16    | 9.9   | 9.3   | 3.1   | 1.7   | 4.1   |
| 26                                                                            | 2.1  | 12    | 4.2   | 6.4   | 3.6   | 17    | 13    | 9.4   | 11    | 3.6   | 1.7   | 3.7   |
| 27                                                                            | 2.1  | 7.9   | 4.2   | 6.0   | 3.6   | 15    | 13    | 8.7   | 7.7   | 6.3   | 1.7   | 3.4   |
| 28                                                                            | 2.2  | 5.7   | 4.2   | 5.8   | 3.6   | 13    | 20    | 12    | 18.3  | 5.6   | 7.0   | 3.3   |
| 29                                                                            | 5.4  | 5.1   | 3.8   | 5.3   |       | 14    | 17    | 13    | 17    | 5.7   | 2.2   | 3.0   |
| 30                                                                            | 3.1  | 4.6   | 4.0   | 5.2   |       | 18    | 13    | 8.9   | 15    | 3.7   | 3.4   | 2.8   |
| 31                                                                            | 2.5  |       | 4.9   |       |       | 24    |       | 18    |       | 3.2   | 3.6   |       |
| TOTAL                                                                         | 83.4 | 158.0 | 151.1 | 187.0 | 148.5 | 369.1 | 571.8 | 363.3 | 452.9 | 288.5 | 103.3 | 130.9 |
| MEAN                                                                          | 2.69 | 5.27  | 4.87  | 6.03  | 5.30  | 11.9  | 19.1  | 11.7  | 15.1  | 9.31  | 3.33  | 4.36  |
| MAX                                                                           | 10   | 21    | 10    | 16    | 17    | 34    | 38    | 32    | 152   | 41    | 11    | 19    |
| MIN                                                                           | 1.4  | 2.2   | 3.8   | 3.6   | 3.6   | 3.3   | 9.3   | 7.9   | 4.8   | 3.1   | 1.7   | 1.7   |
| CFSM                                                                          | .83  | 1.61  | 1.50  | 1.86  | 1.60  | 3.66  | 5.86  | 3.61  | 4.65  | 3.86  | 1.03  | 1.34  |
| IN.                                                                           | .95  | 1.81  | 1.53  | 2.14  | 1.70  | 4.22  | 6.54  | 4.16  | 5.18  | 3.30  | 1.18  | 1.50  |
| WATER YEAR 1973 TOTAL 3007.80 MEAN 8.24 MAX 152. MIN 1.40 CFSM 2.54 IN. 34.42 |      |       |       |       |       |       |       |       |       |       |       |       |

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

| DAY                                                                          | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG  | SEP  |
|------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 1                                                                            | 2.8   | 12    | 6.5   | 10    | 5.7   | 4.4   | 5.0   | 49    | 17    | 12    | 4.4  | 2.1  |
| 2                                                                            | 2.8   | 13    | 5.9   | 8.9   | 5.3   | 4.1   | 5.3   | 24    | 12    | 4.9   | 3.0  | 1.8  |
| 3                                                                            | 12    | 12    | 5.8   | 9.5   | 5.9   | 4.0   | 9.0   | 22    | 10    | 4.4   | 2.6  | 5.3  |
| 4                                                                            | 7.0   | 6.2   | 6.0   | 8.9   | 4.3   | 4.6   | 19    | 26    | 9.1   | 13    | 3.1  | 4.7  |
| 5                                                                            | 14    | 5.2   | 10    | 7.9   | 4.0   | 22    | 29    | 17    | 8.1   | 7.6   | 2.8  | 2.5  |
| 6                                                                            | 7.6   | 4.9   | 14    | 8.2   | 3.8   | 14    | 18    | 15    | 7.6   | 5.3   | 2.3  | 2.0  |
| 7                                                                            | 5.3   | 4.7   | 7.7   | 7.4   | 4.0   | 20    | 14    | 18    | 7.1   | 4.5   | 2.1  | 1.8  |
| 8                                                                            | 4.6   | 4.7   | 6.4   | 6.9   | 3.9   | 13    | 15    | 14    | 6.5   | 6.0   | 2.1  | 1.7  |
| 9                                                                            | 4.3   | 4.7   | 8.3   | 7.1   | 3.8   | 9.1   | 15    | 13    | 6.2   | 6.2   | 2.0  | 1.6  |
| 10                                                                           | 4.2   | 4.4   | 12    | 6.8   | 3.6   | 7.1   | 16    | 19    | 5.6   | 8.5   | 1.9  | 1.6  |
| 11                                                                           | 4.0   | 4.4   | 8.1   | 6.2   | 3.6   | 6.9   | 9.6   | 15    | 5.9   | 4.8   | 1.8  | 1.6  |
| 12                                                                           | 4.0   | 4.4   | 6.5   | 5.9   | 3.6   | 6.0   | 12.4  | 20    | 5.2   | 4.1   | 1.7  | 1.6  |
| 13                                                                           | 3.8   | 4.5   | 5.8   | 5.8   | 3.6   | 5.8   | 12    | 29    | 4.7   | 3.5   | 1.7  | 1.8  |
| 14                                                                           | 4.1   | 5.0   | 18    | 5.7   | 3.5   | 5.9   | 23    | 15    | 4.7   | 3.3   | 1.7  | 1.4  |
| 15                                                                           | 3.9   | 9.0   | 11    | 5.3   | 3.4   | 5.5   | 45    | 13    | 4.4   | 8.4   | 1.6  | 1.4  |
| 16                                                                           | 5.6   | 18    | 7.7   | 5.1   | 3.3   | 5.4   | 20    | 12    | 4.3   | 4.8   | 1.6  | 1.4  |
| 17                                                                           | 4.8   | 7.5   | 8.3   | 5.1   | 3.2   | 12    | 27    | 13    | 22    | 3.5   | 5.2  | 1.4  |
| 18                                                                           | 4.2   | 6.2   | 7.4   | 5.1   | 3.2   | 7.0   | 33    | 11    | 18    | 3.1   | 3.4  | 1.9  |
| 19                                                                           | 3.9   | 5.7   | 6.4   | 4.9   | 3.1   | 6.2   | 28    | 9.7   | 6.8   | 8.5   | 2.3  | 1.5  |
| 20                                                                           | 4.1   | 5.3   | 6.5   | 4.5   | 3.1   | 5.6   | 26    | 9.0   | 6.0   | 4.7   | 2.1  | 2.2  |
| 21                                                                           | 3.9   | 4.9   | 78    | 5.9   | 3.0   | 5.9   | 31    | 8.6   | 5.5   | 3.4   | 1.9  | 3.7  |
| 22                                                                           | 3.7   | 8.3   | 24    | 8.5   | 8.3   | 5.9   | 51    | 8.5   | 5.0   | 3.0   | 1.8  | 2.9  |
| 23                                                                           | 3.6   | 6.8   | 16    | 5.9   | 20    | 5.5   | 59    | 36    | 4.6   | 2.7   | 1.8  | 1.9  |
| 24                                                                           | 3.4   | 6.0   | 12    | 5.7   | 6.7   | 7.3   | 52    | 25    | 4.7   | 2.9   | 2.3  | 1.7  |
| 25                                                                           | 3.3   | 10    | 12    | 5.0   | 5.3   | 5.8   | 33    | 22    | 4.7   | 2.5   | 1.8  | 1.7  |
| 26                                                                           | 3.3   | 6.4   | 18    | 4.9   | 4.7   | 5.9   | 26    | 33    | 5.9   | 2.3   | 1.7  | 2.5  |
| 27                                                                           | 3.2   | 7.3   | 33    | 11    | 4.5   | 5.3   | 30    | 21    | 8.1   | 2.3   | 2.2  | 1.9  |
| 28                                                                           | 5.1   | 11    | 22    | 8.9   | 4.4   | 5.1   | 39    | 18    | 5.0   | 2.7   | 2.4  | 1.9  |
| 29                                                                           | 3.0   | 9.3   | 15    | 6.7   |       | 5.4   | 52    | 16    | 4.1   | 2.7   | 2.9  | 13   |
| 30                                                                           | 5.2   | 7.2   | 13    | 5.9   |       | 4.9   | 40    | 14    | 3.9   | 17    | 3.4  | 7.6  |
| 31                                                                           | 4.4   |       | 11    | 6.3   |       | 5.1   |       | 16    |       | 7.0   | 2.3  |      |
| TOTAL                                                                        | 147.2 | 219.0 | 422.3 | 209.9 | 134.8 | 230.7 | 791.3 | 581.8 | 222.7 | 169.6 | 73.9 | 80.1 |
| MEAN                                                                         | 4.75  | 7.30  | 13.6  | 6.77  | 4.81  | 7.44  | 26.4  | 18.8  | 7.42  | 5.47  | 2.38 | 2.67 |
| MAX                                                                          | 14    | 18    | 78    | 11    | 20    | 22    | 59    | 49    | 22    | 17    | 5.2  | 13   |
| MIN                                                                          | 2.8   | 4.4   | 5.8   | 4.5   | 3.0   | 4.0   | 5.0   | 8.5   | 3.9   | 2.3   | 1.6  | 1.4  |
| CFSM                                                                         | 1.46  | 2.25  | 4.19  | 2.08  | 1.48  | 2.29  | 8.12  | 5.77  | 2.28  | 1.68  | .73  | .82  |
| IN.                                                                          | 1.68  | 2.51  | 4.83  | 2.40  | 1.54  | 2.64  | 9.05  | 6.66  | 2.55  | 1.94  | .85  | .92  |
| WATER YEAR 1974 TOTAL 3283.30 MEAN 9.00 MAX 78. MIN 1.40 CFSM 2.77 IN. 37.57 |       |       |       |       |       |       |       |       |       |       |      |      |

TABULATION OF DAILY MEAN AREAL PRECIPITATION FOR THE W-3 WATERSHED -  
WATER YEARS 1960-1974

| ARS W-3 WATERSHED NEAR DANVILLE, VERMONT                                       |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1959 TO SEPTEMBER 1960 |      |      |      |      |      |      |      |      |      |      |      |      |
| DAY                                                                            | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
| 1                                                                              | .59  | .26  | .02  | .00  | .03  | .00  | .25  | .33  | .10  | .00  | .00  | .01  |
| 2                                                                              | .25  | .14  | .00  | .00  | .07  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 3                                                                              | .00  | .00  | .00  | .88  | .02  | .00  | .37  | .00  | .00  | .29  | .01  | .00  |
| 4                                                                              | .00  | .06  | .00  | .17  | .02  | .00  | .47  | .00  | .00  | .00  | .00  | .10  |
| 5                                                                              | .09  | .01  | .00  | .14  | .00  | .00  | .63  | .00  | .00  | .17  | .78  | .00  |
| 6                                                                              | .65  | .61  | .00  | .00  | .07  | .00  | .07  | .00  | .05  | .00  | .00  | .00  |
| 7                                                                              | .07  | .00  | .29  | .15  | .19  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 8                                                                              | .08  | .00  | .24  | .27  | .00  | .00  | .00  | .00  | .00  | .19  | .08  | .00  |
| 9                                                                              | .11  | .00  | .13  | .00  | .15  | .00  | .14  | .23  | .00  | .01  | .00  | .00  |
| 10                                                                             | .00  | .00  | .21  | .00  | .05  | .00  | .02  | .12  | .00  | .00  | .00  | .18  |
| 11                                                                             | .16  | .00  | .02  | .00  | 1.00 | .00  | .00  | .00  | .00  | .00  | .00  | .21  |
| 12                                                                             | .14  | .06  | 1.24 | .00  | .03  | .00  | .27  | .08  | .00  | .05  | .00  | 2.90 |
| 13                                                                             | .02  | .00  | .13  | .00  | .00  | .00  | .00  | .30  | .00  | .00  | .00  | .28  |
| 14                                                                             | .00  | .42  | .00  | .00  | .27  | .00  | .14  | .06  | .00  | .01  | .00  | .16  |
| 15                                                                             | .00  | .00  | .09  | .16  | .15  | .00  | .00  | 1.24 | 1.08 | .00  | .01  | .00  |
| 16                                                                             | .00  | .00  | .14  | .10  | .00  | .00  | .00  | .24  | .00  | .00  | .00  | .00  |
| 17                                                                             | .59  | .47  | .08  | .00  | .00  | .59  | .00  | .00  | .38  | .00  | .01  | .00  |
| 18                                                                             | .14  | .00  | .07  | .15  | .00  | .01  | .63  | .08  | .11  | .00  | .00  | .00  |
| 19                                                                             | .00  | .00  | .02  | .22  | .73  | .01  | .00  | .00  | .01  | .75  | .00  | .00  |
| 20                                                                             | .17  | .03  | .00  | .06  | .22  | .00  | .00  | .00  | .00  | .04  | .23  | .17  |
| 21                                                                             | .00  | .18  | .00  | .04  | .00  | .00  | .00  | .00  | .00  | .00  | .14  | .00  |
| 22                                                                             | .00  | .00  | .00  | .02  | .00  | .02  | .04  | .00  | .00  | .02  | .14  | .00  |
| 23                                                                             | .81  | .02  | .00  | .00  | .05  | .01  | .00  | .00  | .00  | .00  | .00  | .00  |
| 24                                                                             | 3.00 | .46  | .00  | .00  | .01  | .02  | .23  | .65  | 1.38 | .00  | .00  | .00  |
| 25                                                                             | .27  | .64  | .00  | .00  | .04  | .01  | .33  | .00  | .15  | .00  | .00  | .00  |
| 26                                                                             | .08  | .00  | .00  | .04  | .38  | .00  | .00  | .00  | .01  | .00  | .00  | .00  |
| 27                                                                             | .00  | .62  | .04  | .04  | .14  | .00  | .14  | .00  | .00  | .27  | .00  | .00  |
| 28                                                                             | .00  | 1.58 | .58  | .32  | .07  | .15  | .00  | .00  | .00  | .00  | .00  | .00  |
| 29                                                                             | .00  | .17  | .85  | .00  | .00  | .00  | .00  | .00  | .17  | .00  | .16  | .00  |
| 30                                                                             | .00  | .03  | .06  | .00  | .00  | .36  | .00  | .00  | .14  | 1.81 | .03  | .47  |
| 31                                                                             | .40  | .00  | .04  | .00  | .00  | .62  | .51  | .51  | .00  | .00  | .00  | .00  |
| TOTAL                                                                          | 9.62 | 5.76 | 4.25 | 2.78 | 3.69 | 1.80 | 3.73 | 3.84 | 3.58 | 3.69 | 1.59 | 4.48 |
| WATER YEAR 1960 TOTAL=48.81                                                    |      |      |      |      |      |      |      |      |      |      |      |      |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1960 TO SEPTEMBER 1961

| DAY                         | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1                           | .00  | .52  | .02  | .79  | .01  | .01  | .36  | .00  | .00  | .00  | .00  | .00  |
| 2                           | .09  | .00  | .00  | .00  | .00  | .05  | .12  | .67  | .95  | .73  | .00  | .34  |
| 3                           | .00  | .13  | .00  | .00  | .00  | .00  | .18  | .16  | .00  | .18  | .00  | .48  |
| 4                           | .20  | .00  | .00  | .00  | .06  | .00  | .00  | .10  | .00  | .02  | .00  | .13  |
| 5                           | .00  | .00  | .00  | .00  | .00  | .17  | .00  | .00  | .02  | .00  | .00  | .00  |
| 6                           | .41  | .00  | .00  | .00  | .01  | .17  | .05  | .00  | .07  | .00  | .00  | .00  |
| 7                           | .00  | .00  | .08  | .01  | .00  | .13  | .07  | .03  | .00  | .00  | .00  | .00  |
| 8                           | .00  | .00  | .04  | .18  | .00  | .08  | .01  | .00  | .93  | .78  | .00  | .00  |
| 9                           | .00  | .13  | .01  | .00  | .00  | .76  | .00  | .54  | .00  | .12  | .00  | .00  |
| 10                          | .00  | .09  | .14  | .00  | .00  | .01  | .47  | .11  | 1.02 | .28  | .00  | .00  |
| 11                          | .08  | .03  | .00  | .00  | .00  | .00  | .56  | .00  | .00  | .00  | .57  | .00  |
| 12                          | .00  | .00  | .25  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .42  | .00  |
| 13                          | .00  | .00  | .02  | .00  | .00  | .00  | .29  | .00  | 1.04 | .00  | .02  | .00  |
| 14                          | .57  | .00  | .00  | .00  | .09  | .39  | .17  | .00  | .05  | .02  | .00  | .00  |
| 15                          | .01  | .59  | .00  | .00  | .09  | .38  | .01  | .00  | .00  | .06  | .40  | .59  |
| 16                          | .29  | .04  | .42  | .00  | .00  | .22  | .70  | .34  | .00  | .93  | .23  | .00  |
| 17                          | .00  | .00  | .01  | .00  | .13  | .00  | .07  | .00  | .00  | .00  | .00  | .00  |
| 18                          | .00  | .00  | .01  | .00  | .14  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 19                          | .71  | .00  | .00  | .03  | .07  | .00  | .07  | .00  | .00  | .00  | .00  | .00  |
| 20                          | .22  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .07  | .00  | .00  | .00  |
| 21                          | .00  | .00  | .34  | .00  | .00  | .00  | .00  | .21  | .53  | .30  | 1.08 | .13  |
| 22                          | .00  | .00  | .02  | .00  | .00  | .00  | .16  | .00  | .95  | .00  | .09  | .00  |
| 23                          | .32  | .17  | .00  | .00  | .70  | .00  | .47  | .01  | .00  | .00  | .00  | .00  |
| 24                          | 1.04 | .00  | .00  | .02  | .15  | .00  | .00  | .03  | .37  | .30  | .00  | .00  |
| 25                          | .64  | .00  | .00  | .01  | .84  | .00  | .00  | .02  | .41  | .26  | .10  | .00  |
| 26                          | .00  | .00  | .01  | .02  | .45  | .00  | .70  | .47  | .01  | .00  | .20  | .00  |
| 27                          | .00  | .00  | .03  | .01  | .00  | .00  | .00  | .20  | .00  | .00  | .06  | .00  |
| 28                          | .00  | .21  | .02  | .00  | .00  | .00  | .00  | .03  | .00  | .00  | .00  | .01  |
| 29                          | .00  | .75  | .10  | .02  | .00  | .18  | .02  | .16  | .00  | .07  | .12  | .00  |
| 30                          | .00  | .22  | .00  | .00  | .00  | .03  | .02  | .00  | .00  | .00  | .00  | .00  |
| 31                          | .00  | .00  | .00  | .05  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| TOTAL                       | 4.38 | 2.88 | 2.02 | 1.14 | 2.74 | 2.58 | 4.50 | 3.08 | 6.42 | 4.05 | 3.29 | 1.68 |
| WATER YEAR 1961 TOTAL=38.76 |      |      |      |      |      |      |      |      |      |      |      |      |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1961 TO SEPTEMBER 1962

| DAY                         | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1                           | .00  | .27  | .00  | .01  | .02  | .05  | .85  | .02  | .14  | .03  | .14  | .00  |
| 2                           | .00  | .00  | .00  | .00  | .00  | .00  | .03  | .21  | .00  | .00  | .00  | .00  |
| 3                           | .29  | .00  | .00  | .04  | .10  | .07  | .00  | .35  | .00  | .00  | .00  | .00  |
| 4                           | .29  | .21  | .29  | .13  | .04  | .11  | .00  | .12  | .00  | .00  | .19  | .00  |
| 5                           | .00  | .14  | .54  | .12  | .12  | .17  | .00  | .05  | .05  | .00  | .00  | .33  |
| 6                           | .00  | .07  | .00  | .27  | .14  | .00  | .03  | .04  | .00  | .00  | .24  | .10  |
| 7                           | .00  | .39  | .23  | .36  | .00  | .00  | .84  | .01  | .00  | .00  | .52  | .00  |
| 8                           | .00  | .06  | .12  | .05  | .00  | .00  | .04  | .00  | .00  | .00  | .00  | .00  |
| 9                           | .00  | .08  | .00  | .03  | .05  | .00  | .35  | .00  | .00  | 1.02 | .00  | .01  |
| 10                          | .00  | .01  | .02  | .00  | .05  | .00  | .12  | .00  | .00  | .01  | .49  | 1.02 |
| 11                          | .00  | .01  | .00  | .00  | .00  | .00  | .00  | .00  | .43  | .00  | .02  | .51  |
| 12                          | .00  | .00  | .13  | .00  | .00  | .40  | .00  | .00  | .00  | .00  | .00  | .02  |
| 13                          | .00  | .03  | .04  | .00  | .00  | .34  | .38  | .00  | .00  | .79  | .00  | .00  |
| 14                          | .54  | .19  | .00  | .00  | .10  | .00  | .16  | .19  | .00  | .00  | .68  | .09  |
| 15                          | .01  | .00  | .08  | .66  | .04  | .00  | .19  | .00  | .00  | .19  | .00  | .00  |
| 16                          | .00  | .24  | .00  | .01  | .03  | .00  | .01  | .04  | .00  | .10  | .00  | .00  |
| 17                          | .00  | .07  | .15  | .04  | .22  | .00  | .00  | .00  | .00  | .02  | .00  | 1.09 |
| 18                          | .00  | .09  | .09  | .00  | .00  | .00  | .00  | .00  | .00  | .10  | .00  | .25  |
| 19                          | .00  | .00  | .49  | .00  | .34  | .00  | .00  | .00  | .94  | .00  | .00  | .09  |
| 20                          | .00  | .27  | .25  | .00  | .06  | .02  | .00  | 1.11 | .00  | .00  | .41  | .15  |
| 21                          | .00  | .08  | .00  | .00  | .01  | .00  | .00  | .05  | .00  | .30  | .33  | .00  |
| 22                          | .00  | .00  | .00  | .00  | .29  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 23                          | .00  | .00  | .00  | .02  | .02  | .00  | .12  | .00  | .86  | .44  | .00  | .00  |
| 24                          | .00  | .62  | .01  | .00  | .67  | .00  | .05  | .63  | .13  | .25  | .00  | .00  |
| 25                          | .00  | .00  | .01  | .03  | .10  | .00  | .04  | .00  | .46  | .00  | .00  | .00  |
| 26                          | .08  | .00  | .00  | .07  | .13  | .00  | .00  | .00  | .00  | .39  | .00  | .23  |
| 27                          | .00  | .18  | .02  | .15  | .01  | .05  | .00  | .00  | .00  | .23  | .00  | .38  |
| 28                          | .00  | .21  | .53  | .00  | .09  | .00  | .00  | .00  | .00  | .00  | .00  | .09  |
| 29                          | .04  | .10  | .00  | .00  | .00  | .00  | .08  | .00  | .00  | .03  | .41  | .04  |
| 30                          | .42  | .00  | .01  | .30  | .00  | .00  | .51  | .00  | .03  | .00  | .00  | .01  |
| 31                          | .20  | .00  | .00  | .00  | .00  | .91  | .00  | .00  | .00  | 2.05 | .00  | .00  |
| TOTAL                       | 1.87 | 3.32 | 3.01 | 2.29 | 2.63 | 2.12 | 3.80 | 2.82 | 3.04 | 5.95 | 3.43 | 4.21 |
| WATER YEAR 1962 TOTAL=38.49 |      |      |      |      |      |      |      |      |      |      |      |      |



## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1962 TO SEPTEMBER 1963

| DAY                         | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1                           | .00  | .28  | .00  | .00  | .00  | .13  | .00  | .29  | .00  | .00  | .10  | .00  |
| 2                           | .00  | .00  | .00  | .00  | .00  | .14  | .11  | .00  | .00  | .24  | .69  | .00  |
| 3                           | .00  | .23  | .00  | .00  | .03  | .00  | 1.01 | .00  | .00  | .00  | .00  | .38  |
| 4                           | .00  | .11  | .00  | .00  | .03  | .15  | .41  | .00  | .00  | .27  | .88  | .01  |
| 5                           | .90  | .00  | .01  | .00  | .23  | .00  | .05  | .31  | .00  | .14  | .02  | .00  |
| 6                           | 2.17 | .00  | .24  | .00  | .06  | .81  | .00  | .00  | .10  | .00  | .00  | .00  |
| 7                           | 1.00 | .00  | .10  | .00  | .10  | .18  | .00  | .00  | .00  | .35  | .02  | .00  |
| 8                           | .00  | .00  | .04  | .00  | .03  | .00  | .02  | .45  | .00  | .52  | .00  | .00  |
| 9                           | .54  | .00  | .30  | .01  | .00  | .00  | .00  | .01  | .07  | .00  | .24  | .00  |
| 10                          | .24  | .41  | .15  | .00  | .00  | .32  | .19  | .75  | .00  | .00  | .00  | .00  |
| 11                          | .00  | .47  | .00  | .10  | .00  | .04  | .14  | .27  | .11  | .00  | .11  | .00  |
| 12                          | .21  | .01  | .00  | .20  | .44  | .26  | .00  | .00  | .03  | .00  | .00  | .40  |
| 13                          | .00  | .00  | .00  | .37  | .09  | .26  | .00  | .00  | .00  | .00  | .93  | .00  |
| 14                          | .00  | .00  | .01  | .01  | .01  | .09  | .00  | .08  | .01  | .01  | .71  | .00  |
| 15                          | .00  | .00  | .00  | .00  | .04  | .02  | .00  | .00  | .00  | .08  | .23  | .00  |
| 16                          | .01  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .01  | .00  | .00  | .00  |
| 17                          | .04  | .00  | .00  | .00  | .00  | .25  | .00  | .00  | .44  | .00  | .00  | .00  |
| 18                          | .00  | .04  | .00  | .00  | .00  | .05  | .45  | .29  | .00  | .20  | .19  | .00  |
| 19                          | .00  | .00  | .07  | .00  | .20  | .00  | .19  | .00  | .00  | .15  | .00  | .07  |
| 20                          | .90  | .00  | .03  | .24  | .18  | .34  | .15  | .38  | .09  | .00  | .00  | .01  |
| 21                          | .20  | .15  | .00  | .04  | .23  | .00  | .73  | .00  | .82  | .07  | .00  | .00  |
| 22                          | .00  | .82  | .61  | .00  | .00  | .01  | .03  | .06  | .04  | .00  | .00  | .03  |
| 23                          | .07  | .02  | .08  | .62  | .00  | .01  | .00  | .12  | .00  | .01  | .37  | .00  |
| 24                          | .06  | .17  | .16  | .03  | .22  | .00  | .45  | .00  | .00  | .00  | .04  | .00  |
| 25                          | .20  | .03  | .02  | .00  | .03  | .00  | .06  | .00  | .00  | .00  | .01  | .00  |
| 26                          | .00  | .00  | .00  | .01  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 27                          | .08  | .00  | .00  | .57  | .00  | .07  | .00  | .00  | .15  | .00  | .00  | .06  |
| 28                          | .43  | .00  | .00  | .03  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .04  |
| 29                          | .05  | .00  | .37  | .00  | .00  | .00  | .00  | .00  | .00  | .07  | .13  | .64  |
| 30                          | .08  | .00  | .01  | .00  | .00  | .00  | .60  | .07  | .00  | .97  | .55  | .00  |
| 31                          | 1.14 | .00  | .06  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .04  | .00  |
| TOTAL                       | 7.42 | 2.74 | 2.26 | 2.23 | 2.78 | 3.13 | 4.59 | 3.08 | 1.87 | 3.08 | 5.26 | 1.64 |
| WATER YEAR 1963 TOTAL=40.08 |      |      |      |      |      |      |      |      |      |      |      |      |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1963 TO SEPTEMBER 1964

| DAY                         | OCT | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-----------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|
| 1                           | .00 | .57  | .00  | .23  | .29  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 2                           | .00 | .16  | .00  | .09  | .09  | .00  | .31  | .00  | .00  | .18  | .00  | .00  |
| 3                           | .14 | .00  | .25  | .01  | .00  | .00  | .54  | .00  | .14  | .71  | .00  | .00  |
| 4                           | .08 | .16  | .00  | .09  | .06  | .44  | .00  | .00  | .37  | .00  | .00  | .39  |
| 5                           | .00 | .01  | .02  | .00  | .29  | 1.11 | .00  | .00  | .03  | .09  | .05  | .03  |
| 6                           | .00 | .07  | .00  | .13  | .00  | .00  | .00  | .00  | .00  | .01  | .00  | .00  |
| 7                           | .00 | .31  | .00  | .04  | .09  | .00  | .26  | .00  | .06  | .23  | .00  | .00  |
| 8                           | .04 | .50  | .00  | .00  | .02  | .00  | .05  | .09  | .01  | .00  | .57  | .13  |
| 9                           | .00 | .35  | .75  | .42  | .01  | .46  | .00  | .52  | .00  | .00  | .00  | .03  |
| 10                          | .00 | .12  | .11  | .35  | .00  | .69  | .00  | .26  | .20  | .05  | .00  | .00  |
| 11                          | .23 | .44  | .00  | .00  | .00  | .09  | .00  | .14  | .00  | .07  | .00  | .27  |
| 12                          | .00 | .10  | .28  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .91  | .00  |
| 13                          | .00 | .10  | .02  | .05  | .06  | .00  | .00  | .37  | .00  | .12  | .00  | .00  |
| 14                          | .00 | .06  | .06  | .07  | .07  | .04  | .72  | .66  | .01  | .33  | .16  | .00  |
| 15                          | .00 | .00  | .04  | .00  | .00  | .14  | .28  | .00  | .26  | .00  | .18  | .00  |
| 16                          | .00 | .14  | .00  | .04  | .21  | .01  | .00  | .19  | .06  | .00  | .00  | .00  |
| 17                          | .00 | .00  | .00  | .01  | .00  | .00  | .41  | .18  | .00  | .00  | .05  | .00  |
| 18                          | .00 | .52  | .25  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 19                          | .00 | .01  | .00  | .00  | .01  | .00  | .00  | .31  | .00  | .47  | .00  | .00  |
| 20                          | .00 | .00  | .00  | .06  | .00  | .00  | .01  | .14  | .00  | .00  | .06  | .00  |
| 21                          | .00 | .06  | .00  | .46  | .07  | .00  | .02  | .00  | .00  | .51  | .00  | .00  |
| 22                          | .00 | .02  | .00  | .00  | .00  | .00  | .81  | .01  | .00  | .47  | 1.07 | .00  |
| 23                          | .00 | .73  | .02  | .00  | .00  | .00  | .04  | .00  | .00  | .00  | 1.77 | .00  |
| 24                          | .00 | .00  | .14  | .00  | .02  | .00  | .00  | .34  | .22  | .00  | .09  | .00  |
| 25                          | .00 | .00  | .07  | .69  | .00  | .19  | .00  | .48  | .03  | .00  | .00  | .00  |
| 26                          | .00 | .00  | .00  | .06  | .03  | .76  | .00  | .13  | .09  | .00  | .32  | .00  |
| 27                          | .00 | .00  | .09  | .01  | .00  | .04  | .00  | .37  | .52  | .00  | .00  | .55  |
| 28                          | .00 | .00  | .01  | .00  | .00  | .02  | .00  | .08  | .00  | .00  | .00  | .00  |
| 29                          | .00 | .75  | .01  | .00  | .00  | .49  | .00  | .00  | .02  | .17  | .03  | .00  |
| 30                          | .00 | .58  | .01  | .02  | .00  | .00  | .00  | .00  | .03  | .00  | .00  | .00  |
| 31                          | .02 | .00  | .20  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .02  | .00  |
| TOTAL                       | .51 | 5.76 | 1.93 | 2.78 | 1.32 | 4.48 | 3.45 | 4.27 | 2.05 | 3.41 | 5.28 | 1.40 |
| WATER YEAR 1964 TOTAL=36.64 |     |      |      |      |      |      |      |      |      |      |      |      |

ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1964 TO SEPTEMBER 1965

| DAY                         | OCT  | NOV  | DEC  | JAN  | FEB  | MAR | APR  | MAY | JUN  | JUL  | AUG  | SEP  |
|-----------------------------|------|------|------|------|------|-----|------|-----|------|------|------|------|
| 1                           | .00  | .00  | .00  | .00  | .08  | .00 | .00  | .00 | .00  | .00  | .01  | 1.52 |
| 2                           | .00  | .00  | .00  | .00  | .03  | .00 | .00  | .00 | .00  | .00  | .00  | .02  |
| 3                           | .39  | .00  | .16  | .00  | .01  | .00 | .00  | .00 | .00  | .02  | .67  | .00  |
| 4                           | .03  | .00  | .97  | .00  | .06  | .00 | .00  | .00 | .00  | .00  | .00  | .00  |
| 5                           | .04  | .46  | .08  | .00  | .13  | .00 | .00  | .00 | .00  | .84  | .00  | .00  |
| 6                           | .00  | .02  | .08  | .05  | .02  | .00 | .00  | .00 | .00  | .00  | .19  | .00  |
| 7                           | .00  | .00  | .01  | .01  | .55  | .00 | .16  | .00 | 1.93 | .00  | .57  | .00  |
| 8                           | .00  | .00  | .00  | .06  | .19  | .00 | .11  | .00 | .00  | .28  | .60  | .01  |
| 9                           | .00  | .00  | .05  | .16  | .00  | .00 | .01  | .07 | .09  | .00  | .25  | .00  |
| 10                          | .03  | .11  | .02  | .00  | .63  | .02 | .00  | .10 | .27  | .26  | .93  | .50  |
| 11                          | .05  | .21  | .13  | .00  | .01  | .03 | .00  | .05 | .00  | .00  | .01  | .00  |
| 12                          | .00  | .01  | .07  | .00  | .23  | .00 | .53  | .00 | .35  | .00  | .86  | .00  |
| 13                          | .13  | .10  | .06  | .18  | .01  | .00 | .24  | .00 | 1.23 | .00  | .50  | .24  |
| 14                          | .00  | .00  | .05  | .05  | .00  | .00 | .00  | .00 | .08  | .16  | .00  | .00  |
| 15                          | .00  | .00  | .01  | .01  | .01  | .00 | .13  | .00 | .00  | .01  | .00  | .28  |
| 16                          | .00  | .70  | .00  | .03  | .00  | .00 | .30  | .00 | .04  | .00  | .00  | .00  |
| 17                          | .15  | .02  | .07  | .04  | .00  | .00 | .03  | .13 | .00  | .05  | .00  | .01  |
| 18                          | .44  | .07  | .06  | .00  | .25  | .02 | .04  | .00 | .23  | 1.13 | .78  | .10  |
| 19                          | .19  | .33  | .00  | .00  | .01  | .06 | .00  | .00 | .00  | .00  | .27  | .17  |
| 20                          | .00  | .28  | .01  | .23  | .00  | .00 | .00  | .00 | .00  | .02  | .00  | .00  |
| 21                          | .56  | .04  | .00  | .00  | .00  | .00 | .26  | .00 | .04  | .00  | .00  | .00  |
| 22                          | .01  | .02  | .12  | .03  | .02  | .21 | .08  | .05 | .00  | .00  | .00  | .00  |
| 23                          | .00  | .00  | .03  | .00  | .00  | .04 | .04  | .00 | .40  | .00  | .10  | .09  |
| 24                          | .00  | .00  | .10  | .45  | .00  | .00 | .00  | .00 | .11  | .03  | .00  | 1.02 |
| 25                          | .00  | .01  | .03  | .05  | .67  | .00 | .00  | .00 | .00  | .01  | .00  | .52  |
| 26                          | .00  | 1.10 | .14  | .31  | .02  | .24 | .24  | .00 | .00  | .00  | 1.00 | .00  |
| 27                          | .00  | .00  | .35  | .10  | .00  | .07 | .02  | .06 | .00  | .07  | .01  | .00  |
| 28                          | .03  | .03  | .49  | .02  | .00  | .00 | .00  | .00 | .00  | .00  | .61  | .00  |
| 29                          | .32  | .12  | .00  | .00  | .00  | .16 | .00  | .00 | .00  | .03  | .21  | .00  |
| 30                          | .00  | .00  | .08  | .00  | .00  | .04 | .00  | .00 | .01  | .01  | .00  | .00  |
| 31                          | .00  |      | .11  | .00  |      | .00 |      | .25 |      | .00  | .00  |      |
| TOTAL                       | 2.37 | 3.63 | 3.28 | 1.78 | 2.93 | .89 | 2.24 | .71 | 4.80 | 3.57 | 6.90 | 4.48 |
| WATER YEAR 1965 TOTAL=37.58 |      |      |      |      |      |     |      |     |      |      |      |      |

ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

| DAY                         | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1                           | .94  | .24  | .01  | .00  | .03  | .95  | .01  | .07  | .00  | .00  | .00  | .00  |
| 2                           | .04  | .00  | .00  | .05  | .00  | .32  | .03  | .00  | .00  | .00  | .41  | .00  |
| 3                           | .40  | .00  | .13  | .24  | .00  | .02  | .03  | .21  | .00  | .00  | .01  | .00  |
| 4                           | .01  | .01  | .43  | .00  | .00  | .22  | .00  | .14  | .15  | .07  | .00  | .76  |
| 5                           | .09  | .00  | .00  | .00  | .00  | .86  | .00  | .09  | .31  | .00  | .00  | .00  |
| 6                           | .06  | .00  | .06  | .08  | .00  | .16  | .00  | .41  | .08  | .12  | .00  | .06  |
| 7                           | .19  | .00  | .01  | .00  | .00  | .03  | .09  | .02  | .01  | .14  | .00  | .00  |
| 8                           | .51  | .70  | .00  | .41  | .00  | .00  | .38  | .01  | .31  | .02  | .26  | .01  |
| 9                           | .03  | .16  | .00  | .00  | .00  | .00  | .06  | .56  | .17  | .00  | .00  | .00  |
| 10                          | .01  | .00  | .00  | .00  | .00  | .00  | .01  | .15  | .96  | .50  | .00  | .00  |
| 11                          | .02  | .00  | .00  | .04  | .23  | .00  | .16  | .00  | .00  | .00  | .40  | .00  |
| 12                          | .35  | .00  | .16  | .00  | .00  | .25  | .00  | .23  | .00  | .20  | .24  | .00  |
| 13                          | .00  | .20  | .22  | .01  | .85  | .30  | .01  | .35  | .00  | .08  | .00  | .00  |
| 14                          | .00  | .08  | .18  | .01  | .13  | .00  | .00  | .00  | .19  | .00  | .00  | .05  |
| 15                          | .67  | .00  | .07  | .00  | .00  | .00  | .00  | .00  | .23  | .00  | .00  | .23  |
| 16                          | .00  | .63  | .09  | .02  | .08  | .00  | .00  | .01  | .40  | .00  | .88  | .00  |
| 17                          | .00  | 1.38 | .03  | .01  | .08  | .00  | .00  | .11  | .00  | .00  | .33  | .00  |
| 18                          | .00  | .08  | .01  | .00  | .02  | .01  | .00  | .46  | .00  | .10  | .00  | .00  |
| 19                          | .00  | .01  | .08  | .13  | .00  | .00  | .00  | .97  | .00  | .38  | .00  | .00  |
| 20                          | .00  | .02  | .00  | .00  | .02  | .11  | .00  | .16  | .05  | .00  | .00  | .00  |
| 21                          | .00  | .15  | .00  | .01  | .00  | .00  | .16  | .00  | .00  | .04  | .00  | .37  |
| 22                          | .15  | .01  | .01  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .48  | 1.05 |
| 23                          | .69  | .00  | .01  | .22  | .00  | .00  | .00  | .00  | .00  | .00  | .64  | .45  |
| 24                          | .06  | .00  | .38  | .09  | .00  | .34  | .19  | .00  | .00  | .00  | .01  | .06  |
| 25                          | .00  | .11  | .23  | .00  | .71  | .50  | .00  | .00  | .24  | .00  | .08  | .10  |
| 26                          | .00  | .27  | .03  | .00  | .01  | .00  | .00  | .00  | .00  | .53  | .06  | .00  |
| 27                          | .10  | .95  | .00  | .13  | .00  | .03  | .00  | .00  | .00  | .00  | .11  | .00  |
| 28                          | .10  | .15  | .00  | .00  | .04  | .03  | .01  | .00  | .00  | .14  | .00  | .00  |
| 29                          | .00  | .06  | .00  | .00  | .00  | .00  | .03  | .00  | .58  | .26  | .00  | .13  |
| 30                          | .00  | .02  | .00  | .37  | .00  | .18  | .05  | .00  | .00  | .00  | .51  | .07  |
| 31                          | .18  |      | .00  | .00  |      | .01  |      | .00  |      | .00  | .00  |      |
| TOTAL                       | 4.60 | 5.23 | 2.14 | 1.82 | 2.20 | 4.32 | 1.22 | 3.95 | 3.68 | 2.58 | 4.42 | 3.34 |
| WATER YEAR 1966 TOTAL=39.50 |      |      |      |      |      |      |      |      |      |      |      |      |

ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

| DAY                         | OCT  | NOV  | DEC  | JAN  | FEB  | MAR | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-----------------------------|------|------|------|------|------|-----|------|------|------|------|------|------|
| 1                           | .02  | .00  | .19  | .10  | .07  | .00 | .00  | .00  | .00  | .00  | .00  | .00  |
| 2                           | .00  | .01  | .11  | .02  | .29  | .00 | .09  | .17  | .00  | .00  | .00  | .10  |
| 3                           | .00  | 1.00 | .02  | .00  | .00  | .05 | .10  | 1.01 | .00  | .45  | .09  | .05  |
| 4                           | .17  | .01  | .00  | .11  | .09  | .00 | .00  | .13  | .00  | .00  | .71  | .18  |
| 5                           | .20  | .07  | .03  | .24  | .02  | .21 | .00  | .14  | .00  | .00  | .00  | .00  |
| 6                           | .05  | .07  | .02  | .00  | .00  | .05 | .44  | .00  | .00  | .00  | .00  | .01  |
| 7                           | .00  | .05  | .33  | .06  | .00  | .20 | .29  | .20  | .23  | .00  | .00  | .00  |
| 8                           | .00  | .09  | .31  | .00  | .00  | .01 | .00  | .23  | .17  | .00  | .00  | .00  |
| 9                           | .00  | .03  | .00  | .00  | .00  | .00 | .00  | .17  | .12  | .60  | .20  | .13  |
| 10                          | .29  | .20  | .02  | .00  | .00  | .00 | .59  | .07  | .01  | .01  | .05  | .46  |
| 11                          | .02  | .22  | .40  | .00  | .07  | .00 | .00  | .33  | .75  | .00  | .00  | .00  |
| 12                          | .18  | .00  | .00  | .09  | .00  | .00 | .00  | .05  | .00  | .96  | .00  | .00  |
| 13                          | .00  | .00  | .00  | .02  | .00  | .00 | .01  | .00  | .00  | .00  | .01  | .00  |
| 14                          | .00  | .00  | .05  | .05  | .00  | .05 | .00  | .00  | .15  | .00  | .02  | .00  |
| 15                          | .00  | .00  | .00  | .02  | .00  | .02 | .58  | .31  | .38  | .00  | .00  | .00  |
| 16                          | .11  | .18  | .00  | .00  | .38  | .06 | .26  | .04  | .11  | .83  | .00  | .00  |
| 17                          | .00  | .05  | .00  | .00  | .00  | .00 | .64  | .44  | .35  | .00  | .00  | .00  |
| 18                          | .00  | .02  | .03  | .00  | .00  | .00 | .44  | .16  | .01  | .00  | .00  | .00  |
| 19                          | .20  | .00  | .00  | .00  | .00  | .00 | .01  | .83  | .00  | .05  | .14  | .00  |
| 20                          | .97  | .00  | .00  | .00  | .31  | .00 | .00  | .10  | .01  | .02  | .14  | .00  |
| 21                          | .00  | .00  | .00  | .00  | .11  | .00 | .00  | .04  | .01  | .42  | .00  | .00  |
| 22                          | .00  | .00  | .00  | .00  | .00  | .00 | .30  | .20  | .40  | .03  | .11  | .49  |
| 23                          | .00  | .00  | .00  | .12  | .62  | .00 | .42  | .00  | .00  | .01  | .00  | .00  |
| 24                          | .00  | .00  | .35  | .00  | .02  | .00 | .04  | .00  | .02  | .41  | .00  | .46  |
| 25                          | .00  | .21  | .44  | .00  | .00  | .00 | .00  | .76  | .28  | .52  | .00  | .13  |
| 26                          | .00  | .00  | .03  | .00  | .00  | .00 | .00  | .62  | .00  | .00  | .00  | .00  |
| 27                          | .00  | .00  | .00  | .36  | .00  | .11 | .00  | .00  | .00  | .00  | .90  | .00  |
| 28                          | .00  | .00  | .00  | .28  | .14  | .03 | .00  | .00  | .00  | .31  | .49  | .00  |
| 29                          | .07  | .11  | .93  | .02  | .00  | .00 | .00  | .00  | .00  | .00  | .00  | .31  |
| 30                          | .00  | .46  | .06  | .01  | .00  | .00 | .00  | .00  | .00  | .00  | .49  | .34  |
| 31                          | .00  | .00  | .00  | .00  | .00  | .00 | .00  | .00  | .00  | .31  | .14  | .00  |
| TOTAL                       | 2.28 | 2.82 | 3.32 | 1.56 | 2.12 | .80 | 4.20 | 6.00 | 3.00 | 4.93 | 3.49 | 2.66 |
| WATER YEAR 1967 TOTAL=37.18 |      |      |      |      |      |     |      |      |      |      |      |      |

ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

| DAY                         | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1                           | .28  | .00  | .00  | .07  | .00  | .30  | .24  | .00  | .00  | .00  | .15  | .00  |
| 2                           | .00  | .34  | .00  | .01  | .13  | .00  | .00  | .00  | .08  | .00  | .03  | .05  |
| 3                           | .00  | .10  | .45  | .14  | .33  | .00  | .00  | .03  | .00  | .00  | .00  | .01  |
| 4                           | .00  | .30  | .01  | .11  | .02  | .00  | .13  | .14  | .02  | .00  | .00  | .00  |
| 5                           | .49  | .00  | .00  | .03  | .04  | .01  | .22  | .00  | .00  | .00  | .02  | .00  |
| 6                           | .02  | .00  | .00  | .02  | .03  | .00  | .00  | .00  | .00  | .32  | .03  | .48  |
| 7                           | .00  | .00  | .00  | .26  | .00  | .00  | .00  | .00  | .00  | .00  | .05  | .00  |
| 8                           | .01  | .00  | .27  | .01  | .00  | .00  | .02  | .00  | .00  | .00  | .04  | .00  |
| 9                           | .16  | .00  | .00  | .00  | .00  | .00  | .10  | .28  | .97  | .49  | .38  | .00  |
| 10                          | 1.47 | .00  | .00  | .00  | .15  | .00  | .06  | .00  | .36  | .55  | .06  | .00  |
| 11                          | .06  | .00  | .01  | .00  | .09  | .00  | .04  | .00  | .00  | .00  | .00  | 1.51 |
| 12                          | .00  | .17  | 1.67 | .00  | .02  | .49  | .00  | .12  | .18  | .00  | .00  | .35  |
| 13                          | .00  | .20  | .00  | .00  | .02  | .43  | .00  | .00  | .08  | .00  | .00  | .02  |
| 14                          | .05  | .05  | .01  | .02  | .05  | .00  | .00  | .00  | .00  | .00  | .03  | .00  |
| 15                          | .00  | .39  | .04  | .14  | .20  | .00  | .41  | .00  | .57  | .00  | .00  | .00  |
| 16                          | .00  | .00  | .01  | .00  | .00  | .03  | .00  | .13  | .00  | .00  | .00  | .00  |
| 17                          | .01  | .18  | .00  | .00  | .04  | .82  | .00  | .77  | .05  | .37  | .64  | .00  |
| 18                          | 1.45 | .15  | .00  | .00  | .05  | .12  | .00  | .44  | .03  | .00  | .00  | .00  |
| 19                          | .00  | .11  | .01  | .07  | .01  | .01  | .00  | .12  | .41  | .13  | .00  | .00  |
| 20                          | .05  | .06  | .00  | .00  | .02  | .00  | .00  | .87  | .08  | .00  | 1.19 | .00  |
| 21                          | .06  | .03  | .00  | .10  | .00  | .14  | .00  | .00  | .00  | .00  | .03  | .00  |
| 22                          | .05  | .09  | .03  | .00  | .09  | .54  | .00  | .02  | .10  | .00  | .00  | .00  |
| 23                          | .00  | .59  | .01  | .21  | .01  | .88  | .00  | .00  | .00  | .00  | .00  | .00  |
| 24                          | .00  | .03  | .00  | .00  | .00  | .15  | 1.33 | .00  | .39  | .07  | .10  | .00  |
| 25                          | .01  | .02  | .02  | .00  | .00  | .01  | .56  | .00  | .00  | .01  | .48  | .53  |
| 26                          | .94  | .06  | .22  | .00  | .00  | .00  | .00  | .00  | .08  | .00  | .00  | .00  |
| 27                          | .00  | .03  | .00  | .00  | .00  | .00  | .34  | .00  | .01  | .08  | .00  | .04  |
| 28                          | .00  | .13  | .41  | .13  | .00  | .00  | .00  | .00  | .23  | .48  | .00  | .04  |
| 29                          | .00  | .07  | .80  | .15  | .13  | .00  | .00  | .18  | .67  | .00  | .00  | .01  |
| 30                          | .00  | .00  | .00  | .29  | .00  | .00  | .00  | .19  | .35  | .00  | .00  | .00  |
| 31                          | .00  | .00  | .14  | .00  | .00  | .00  | .00  | .04  | .00  | .00  | .00  | .00  |
| TOTAL                       | 5.17 | 3.10 | 4.16 | 1.76 | 1.43 | 3.93 | 3.45 | 3.33 | 4.66 | 2.50 | 3.23 | 3.04 |
| WATER YEAR 1968 TOTAL=39.76 |      |      |      |      |      |      |      |      |      |      |      |      |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

| DAY                         | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1                           | .00  | .05  | .00  | .25  | .08  | .00  | .27  | .00  | .00  | .02  | .17  | .12  |
| 2                           | .00  | .04  | .08  | .02  | .01  | .00  | .29  | .00  | .01  | .00  | .17  | .01  |
| 3                           | .33  | .00  | .00  | .00  | .53  | .05  | .00  | .00  | .41  | .04  | .01  | .00  |
| 4                           | .48  | .00  | 1.27 | .00  | .16  | .00  | .00  | .00  | .00  | .00  | .17  | .00  |
| 5                           | .26  | .00  | .45  | .00  | .02  | .00  | .21  | .00  | .00  | .08  | .68  | .00  |
| 6                           | .00  | .00  | .23  | .00  | .02  | .00  | .00  | .00  | .34  | .00  | .33  | .64  |
| 7                           | .50  | .24  | .01  | 1.12 | .00  | .00  | .00  | .11  | .00  | .00  | .00  | .69  |
| 8                           | .01  | .57  | .00  | .06  | .00  | .08  | .00  | .29  | .00  | .00  | .20  | .25  |
| 9                           | .00  | .04  | .00  | .01  | .35  | .01  | .00  | .39  | .00  | .00  | .02  | .01  |
| 10                          | .00  | .28  | .00  | .09  | .39  | .04  | .43  | .05  | .00  | .16  | .39  | .00  |
| 11                          | .11  | .03  | .00  | .01  | .00  | .04  | .01  | .53  | .00  | .27  | .00  | .04  |
| 12                          | .00  | .17  | .00  | .00  | .00  | .02  | .00  | .14  | .00  | .28  | .00  | .00  |
| 13                          | .00  | .32  | .00  | .03  | .04  | .00  | .00  | .31  | .79  | .03  | .00  | .00  |
| 14                          | .00  | .02  | .32  | .03  | .00  | .00  | .00  | .23  | .00  | .00  | .00  | .00  |
| 15                          | .00  | .41  | .58  | .00  | .00  | .00  | .00  | .00  | 1.29 | .00  | .00  | .00  |
| 16                          | .00  | .02  | .03  | .00  | .01  | .03  | .02  | .00  | .29  | .00  | .03  | .04  |
| 17                          | .00  | .04  | .01  | .00  | .00  | .18  | .03  | .06  | .00  | .00  | .50  | .46  |
| 18                          | .00  | 1.12 | .00  | .20  | .00  | .18  | .70  | .11  | .00  | .00  | .17  | .00  |
| 19                          | .51  | .13  | .14  | .01  | .02  | .32  | .63  | .68  | .03  | .00  | .23  | .00  |
| 20                          | .00  | .17  | .46  | .00  | .00  | .02  | .00  | 1.87 | .26  | .00  | .00  | .00  |
| 21                          | .00  | .03  | .00  | .00  | .00  | .16  | .00  | .02  | .00  | .58  | .00  | .00  |
| 22                          | .00  | .35  | .09  | .00  | .00  | .03  | .01  | .00  | .00  | .81  | .00  | .00  |
| 23                          | .03  | .03  | .68  | .00  | .00  | .00  | .28  | .01  | .31  | .00  | .00  | .00  |
| 24                          | .00  | .10  | .09  | .38  | .46  | .00  | .22  | .00  | .20  | .00  | .09  | .01  |
| 25                          | .30  | .05  | .01  | .00  | 1.34 | .68  | .01  | .20  | .04  | .00  | .27  | .16  |
| 26                          | .04  | .02  | .00  | .00  | .01  | .07  | .00  | .00  | .00  | .70  | .00  | .06  |
| 27                          | .00  | .16  | .01  | .00  | .00  | .04  | .04  | .00  | .40  | .09  | .00  | .01  |
| 28                          | .57  | .68  | 1.06 | .00  | .00  | .00  | .38  | .15  | .14  | .56  | .00  | .00  |
| 29                          | .02  | .40  | .02  | .14  | .00  | .14  | .04  | .01  | .00  | .77  | .00  | .05  |
| 30                          | .01  | .00  | .00  | .40  | .00  | .02  | .00  | .02  | .02  | .39  | .00  | .00  |
| 31                          | .01  | .00  | .09  | .40  | .00  | .03  | .00  | .00  | .00  | .00  | .00  | .00  |
| TOTAL                       | 3.18 | 5.47 | 5.63 | 3.15 | 3.44 | 2.14 | 3.57 | 5.18 | 4.53 | 4.78 | 3.43 | 2.55 |
| WATER YEAR 1969 TOTAL=47.05 |      |      |      |      |      |      |      |      |      |      |      |      |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

| DAY                         | OCT  | NOV  | DEC  | JAN | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-----------------------------|------|------|------|-----|------|------|------|------|------|------|------|------|
| 1                           | .00  | .00  | .04  | .00 | .00  | .00  | .00  | .00  | .08  | .00  | .74  | .10  |
| 2                           | .24  | .41  | .01  | .00 | .77  | .01  | 1.58 | .05  | .00  | .10  | .19  | .01  |
| 3                           | .32  | .14  | .06  | .00 | .71  | .00  | .28  | .27  | .05  | .00  | .16  | .58  |
| 4                           | .00  | 1.37 | .04  | .00 | .21  | .17  | .00  | .00  | .00  | .33  | .00  | .55  |
| 5                           | .00  | .88  | .02  | .00 | .01  | .15  | .00  | .14  | 1.07 | .00  | .00  | .22  |
| 6                           | .00  | .30  | .00  | .00 | .00  | .00  | .00  | .18  | .13  | .00  | .00  | .18  |
| 7                           | .00  | .16  | .00  | .00 | .00  | .00  | .00  | .06  | .00  | .00  | .00  | .00  |
| 8                           | .06  | .19  | .30  | .00 | .00  | .14  | .00  | .00  | .00  | .00  | .00  | .00  |
| 9                           | .06  | .03  | .22  | .04 | .09  | .01  | .01  | .09  | .00  | .00  | .00  | .00  |
| 10                          | .00  | .01  | .16  | .04 | .03  | .05  | .00  | .30  | .00  | .07  | .10  | .14  |
| 11                          | .00  | .23  | .71  | .00 | .45  | .01  | .00  | .31  | .17  | .09  | .00  | .01  |
| 12                          | .00  | .04  | .00  | .03 | .10  | .00  | .00  | .00  | .00  | .00  | .01  | .00  |
| 13                          | .00  | .29  | .05  | .06 | .00  | .32  | .00  | .00  | .00  | .00  | .00  | .00  |
| 14                          | .09  | .27  | .06  | .03 | .00  | .11  | .00  | .00  | .00  | .00  | .00  | .00  |
| 15                          | .00  | .17  | .05  | .00 | .36  | .05  | .00  | .00  | .00  | .00  | .00  | .21  |
| 16                          | .00  | .00  | .00  | .00 | .02  | .00  | .00  | .01  | .00  | .16  | .00  | .16  |
| 17                          | .05  | .00  | .00  | .01 | .00  | .01  | .34  | 1.07 | .00  | .00  | .00  | .00  |
| 18                          | .13  | .00  | .00  | .06 | .00  | .00  | .04  | .01  | .10  | .52  | .00  | .04  |
| 19                          | .01  | .32  | .14  | .00 | .09  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 20                          | .91  | .93  | .07  | .00 | .00  | .17  | .20  | .00  | .00  | .00  | .37  | .00  |
| 21                          | .08  | .02  | .02  | .00 | .00  | .37  | .19  | .00  | .01  | .01  | .13  | .00  |
| 22                          | .49  | .00  | 1.23 | .00 | .07  | .04  | .00  | .39  | .08  | .00  | .00  | .25  |
| 23                          | .00  | .08  | .00  | .03 | .04  | .15  | .00  | .00  | .00  | .00  | 1.01 | .02  |
| 24                          | .00  | .13  | .00  | .00 | .07  | .15  | 1.17 | .00  | .00  | .00  | .00  | .00  |
| 25                          | .03  | .00  | .00  | .08 | .19  | .10  | .00  | .04  | .05  | .00  | .05  | .02  |
| 26                          | .00  | .05  | 1.04 | .23 | .00  | .09  | .00  | .38  | .18  | .00  | .18  | .00  |
| 27                          | .16  | .00  | 1.30 | .00 | .01  | .14  | .00  | .00  | 1.09 | .00  | .00  | .57  |
| 28                          | .00  | .00  | .16  | .00 | .08  | .09  | .00  | .00  | .00  | .00  | 1.27 | .03  |
| 29                          | .00  | .00  | .00  | .22 | .00  | .01  | .00  | .00  | .28  | .00  | .00  | .20  |
| 30                          | .00  | .06  | .00  | .00 | .00  | .00  | .00  | .00  | .89  | .00  | .05  | .01  |
| 31                          | .00  | .00  | .00  | .00 | .00  | .00  | .00  | .01  | .00  | .00  | .06  | .00  |
| TOTAL                       | 2.61 | 6.08 | 5.68 | .99 | 3.21 | 2.34 | 3.81 | 3.31 | 4.18 | 1.28 | 4.32 | 3.10 |
| WATER YEAR 1970 TOTAL=40.91 |      |      |      |     |      |      |      |      |      |      |      |      |



## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

| DAY | OCT | NOV | DEC  | JAN | FEB | MAR | APR | MAY | JUN | JUL  | AUG  | SEP |
|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|------|------|-----|
| 1   | .00 | .00 | .00  | .00 | .00 | .01 | .00 | .00 | .00 | 1.00 | .02  | .00 |
| 2   | .00 | .00 | .07  | .00 | .02 | .00 | .24 | .37 | .11 | .00  | .49  | .00 |
| 3   | .35 | .00 | .00  | .07 | .00 | .33 | .11 | .79 | .08 | .00  | 2.42 | .00 |
| 4   | .01 | .00 | 1.08 | .00 | .00 | .81 | .00 | .19 | .00 | .00  | .00  | .00 |
| 5   | .05 | .00 | .09  | .08 | .40 | .21 | .00 | .15 | .00 | .00  | .00  | .01 |
| 6   | .00 | .02 | .35  | .00 | .02 | .01 | .00 | .00 | .00 | .16  | .00  | .00 |
| 7   | .00 | .00 | .00  | .13 | .08 | .86 | .20 | .00 | .57 | .00  | .00  | .00 |
| 8   | .00 | .00 | .02  | .00 | .92 | .07 | .00 | .03 | .49 | .00  | .00  | .00 |
| 9   | .00 | .00 | .78  | .00 | .26 | .01 | .00 | .05 | .00 | .00  | .00  | .00 |
| 10  | .00 | .04 | .07  | .02 | .01 | .00 | .73 | .00 | .00 | .00  | .00  | .00 |
| 11  | .09 | .32 | .00  | .11 | .00 | .26 | .20 | .00 | .00 | .00  | .36  | .00 |
| 12  | .00 | .00 | .00  | .08 | .03 | .05 | .00 | .00 | .00 | .00  | .00  | .63 |
| 13  | .06 | .00 | .26  | .00 | .51 | .00 | .00 | .24 | .00 | .33  | .00  | .06 |
| 14  | .19 | .01 | .07  | .16 | .19 | .00 | .05 | .01 | .00 | .62  | .00  | .29 |
| 15  | .42 | .59 | .00  | .03 | .00 | .09 | .00 | .00 | .00 | .00  | .00  | .00 |
| 16  | .07 | .05 | .00  | .00 | .00 | .07 | .18 | .00 | .00 | .21  | .00  | .01 |
| 17  | .06 | .00 | .56  | .00 | .02 | .00 | .00 | .11 | .00 | .46  | .00  | .04 |
| 18  | .05 | .00 | .04  | .00 | .07 | .00 | .00 | .00 | .00 | .08  | .00  | .14 |
| 19  | .00 | .12 | .16  | .00 | .02 | .40 | .00 | .00 | .00 | .37  | .00  | .00 |
| 20  | .00 | .22 | .07  | .00 | .59 | .33 | .01 | .00 | .00 | .00  | .78  | .04 |
| 21  | .00 | .32 | .03  | .26 | .07 | .16 | .22 | .36 | .51 | .00  | .19  | .29 |
| 22  | .16 | .02 | .44  | .17 | .00 | .00 | .26 | .07 | .00 | .00  | .17  | .00 |
| 23  | .40 | .23 | .06  | .18 | .75 | .00 | .02 | .00 | .00 | .00  | 1.19 | .00 |
| 24  | .00 | .02 | .62  | .00 | .08 | .00 | .00 | .03 | .00 | .06  | .00  | .00 |
| 25  | .00 | .00 | .00  | .00 | .02 | .00 | .04 | .57 | .56 | .01  | .00  | .00 |
| 26  | .00 | .01 | .03  | .94 | .00 | .00 | .00 | .13 | .00 | .00  | .00  | .00 |
| 27  | .00 | .00 | .03  | .15 | .12 | .00 | .02 | .21 | .00 | .26  | .38  | .00 |
| 28  | .00 | .41 | .00  | .00 | .05 | .00 | .06 | .00 | .00 | .00  | 3.11 | .00 |
| 29  | .00 | .04 | .00  | .05 | .00 | .01 | .06 | .00 | .00 | .26  | .02  | .08 |
| 30  | .00 | .10 | .00  | .29 | .00 | .11 | .15 | .00 | .00 | .00  | .14  | .00 |
| 31  | .00 | .00 | .00  | .03 | .00 | .00 | .00 | .00 | .00 | .21  | .00  | .00 |

TOTAL 1.91 2.59 4.83 2.75 4.23 3.79 2.55 3.31 2.32 4.03 9.27 1.59

WATER YEAR 1971 TOTAL=43.17

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY | OCT  | NOV  | DEC | JAN | FEB | MAR | APR | MAY | JUN  | JUL  | AUG | SEP |
|-----|------|------|-----|-----|-----|-----|-----|-----|------|------|-----|-----|
| 1   | .00  | .00  | .01 | .00 | .01 | .05 | .00 | .00 | .74  | .01  | .00 | .00 |
| 2   | .19  | .24  | .00 | .37 | .00 | .71 | .04 | .84 | .13  | .00  | .37 | .00 |
| 3   | .00  | .00  | .19 | .04 | .28 | .57 | .07 | .96 | .00  | .91  | .42 | .00 |
| 4   | .00  | .06  | .00 | .08 | .48 | .01 | .17 | .92 | .49  | .00  | .00 | .00 |
| 5   | .00  | .05  | .00 | .09 | .02 | .28 | .01 | .10 | .00  | .00  | .00 | .00 |
| 6   | .17  | .00  | .27 | .00 | .03 | .01 | .23 | .03 | .54  | .00  | .00 | .00 |
| 7   | .04  | .39  | .14 | .13 | .00 | .10 | .01 | .05 | .04  | .07  | .40 | .00 |
| 8   | .04  | .05  | .02 | .04 | .01 | .18 | .00 | .00 | .00  | .03  | .09 | .18 |
| 9   | .08  | .00  | .32 | .00 | .00 | .04 | .00 | .00 | .45  | .00  | .02 | .05 |
| 10  | 1.29 | .12  | .06 | .00 | .00 | .00 | .00 | .00 | .06  | 1.32 | .07 | .00 |
| 11  | .07  | .12  | .11 | .08 | .00 | .00 | .01 | .10 | .00  | .01  | .00 | .00 |
| 12  | .12  | .04  | .00 | .08 | .00 | .00 | .00 | .00 | .00  | .00  | .02 | .00 |
| 13  | .00  | .00  | .05 | .10 | .12 | .00 | .73 | .00 | .00  | .01  | .00 | .11 |
| 14  | .00  | .00  | .01 | .03 | .01 | .10 | .10 | .14 | .00  | .00  | .04 | .10 |
| 15  | .00  | .00  | .36 | .03 | .00 | .57 | .41 | .20 | .76  | .00  | .00 | .00 |
| 16  | .00  | .00  | .12 | .00 | .01 | .00 | .02 | .10 | .26  | .47  | .00 | .00 |
| 17  | .00  | .00  | .00 | .12 | .00 | .94 | .03 | .00 | .00  | .48  | .00 | .00 |
| 18  | .00  | .00  | .06 | .00 | .00 | .30 | .05 | .00 | .00  | .00  | .32 | .00 |
| 19  | .00  | .15  | .04 | .12 | .52 | .00 | .17 | .00 | .00  | .19  | .00 | .03 |
| 20  | .00  | .05  | .05 | .25 | .03 | .00 | .13 | .03 | .00  | .00  | .00 | .00 |
| 21  | .00  | .04  | .04 | .04 | .15 | .01 | .00 | .00 | .03  | 1.65 | .00 | .00 |
| 22  | .00  | .00  | .04 | .00 | .15 | .53 | .00 | .00 | .00  | .00  | .00 | .00 |
| 23  | .00  | .00  | .00 | .01 | .01 | .37 | .28 | .00 | .16  | .14  | .02 | .00 |
| 24  | .02  | .00  | .63 | .06 | .15 | .08 | .04 | .00 | .11  | .23  | .00 | .00 |
| 25  | .42  | 1.38 | .08 | .33 | .00 | .00 | .00 | .00 | .00  | .47  | .00 | .00 |
| 26  | .00  | .15  | .03 | .00 | .46 | .01 | .00 | .00 | .17  | .04  | .00 | .05 |
| 27  | .00  | .03  | .13 | .01 | .00 | .02 | .00 | .00 | .00  | .09  | .29 | .00 |
| 28  | .00  | .02  | .20 | .09 | .00 | .00 | .00 | .00 | 1.26 | .00  | .03 | .00 |
| 29  | .00  | .51  | .03 | .03 | .00 | .00 | .00 | .00 | .00  | .03  | .00 | .33 |
| 30  | .00  | .62  | .55 | .02 | .00 | .09 | .00 | .00 | .17  | .00  | .05 | .45 |
| 31  | .00  | .10  | .02 | .00 | .00 | .05 | .00 | .15 | .00  | .00  | .00 | .00 |

TOTAL 2.44 4.02 3.64 2.17 2.44 5.02 2.50 3.62 5.37 6.02 2.61 1.30

WATER YEAR 1972 TOTAL=41.15

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

| DAY                         | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN   | JUL  | AUG  | SEP  |
|-----------------------------|------|------|------|------|------|------|------|------|-------|------|------|------|
| 1                           | .00  | .00  | .79  | .24  | .00  | .03  | .28  | .00  | .29   | .04  | .14  | .00  |
| 2                           | .00  | .27  | .06  | .01  | .66  | .05  | .38  | .10  | .00   | .15  | .29  | .00  |
| 3                           | .00  | .46  | .05  | .01  | .01  | .00  | .16  | .48  | .00   | .00  | .76  | .00  |
| 4                           | .00  | .13  | .37  | .22  | .08  | .12  | .74  | .00  | .23   | .05  | .11  | .01  |
| 5                           | .00  | .31  | .20  | .26  | .07  | .00  | .55  | .00  | .03   | .00  | .00  | .00  |
| 6                           | .00  | .00  | .54  | .04  | .01  | .00  | .00  | .03  | .00   | .00  | .01  | 1.90 |
| 7                           | 1.79 | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .06   | .00  | .00  | .00  |
| 8                           | .15  | 1.04 | .46  | .00  | .11  | .30  | .00  | .00  | .00   | .00  | .00  | .00  |
| 9                           | .07  | .59  | .04  | .04  | .02  | .00  | .00  | .51  | .00   | .00  | .00  | .01  |
| 10                          | .00  | .00  | .14  | .09  | .00  | .02  | .70  | .02  | .00   | .50  | .47  | .01  |
| 11                          | .00  | .00  | .00  | .05  | .00  | .17  | .15  | .32  | .23   | .05  | .41  | .04  |
| 12                          | .13  | .01  | .35  | .03  | .00  | .16  | .04  | .28  | .58   | .00  | .04  | .00  |
| 13                          | .00  | .05  | .22  | .00  | .11  | .00  | .00  | .07  | .31   | .00  | .00  | .00  |
| 14                          | .21  | .31  | .00  | .05  | .00  | .00  | .00  | .00  | .13   | .96  | .00  | .34  |
| 15                          | .11  | .11  | .53  | .07  | .53  | .18  | .00  | .23  | .01   | .03  | .07  | .18  |
| 16                          | .00  | .01  | .47  | .01  | .01  | .00  | .00  | .19  | 1.89  | .00  | .00  | .02  |
| 17                          | .09  | .00  | .06  | .00  | .00  | 1.29 | .00  | .00  | .01   | .00  | .00  | .00  |
| 18                          | .00  | .00  | .04  | .00  | .00  | .10  | .00  | .20  | .00   | .00  | .00  | 1.36 |
| 19                          | .00  | .02  | .15  | .19  | .01  | .15  | .00  | .19  | .00   | .00  | .00  | .01  |
| 20                          | .00  | .81  | .03  | .85  | .00  | .06  | .00  | .06  | .00   | .12  | .00  | .03  |
| 21                          | .00  | .02  | .20  | .00  | .19  | .00  | .00  | 1.74 | .73   | .00  | .00  | .00  |
| 22                          | .01  | .01  | .30  | .44  | .04  | .00  | .58  | .14  | .63   | .00  | .23  | .94  |
| 23                          | .36  | .00  | .00  | .36  | .10  | .00  | .00  | .00  | .00   | .00  | .00  | .00  |
| 24                          | .05  | .05  | .00  | .03  | .00  | .00  | .00  | .00  | .13   | .00  | .00  | .03  |
| 25                          | .01  | .00  | .01  | .00  | .00  | .00  | .00  | .00  | .28   | .00  | .00  | .00  |
| 26                          | .00  | 1.03 | .12  | .00  | .00  | .08  | .00  | .00  | .00   | .12  | .01  | .00  |
| 27                          | .00  | .00  | .08  | .00  | .00  | .00  | .26  | .00  | .16   | .73  | .00  | .05  |
| 28                          | .32  | .34  | .06  | .14  | .00  | .00  | .43  | .51  | .09   | .15  | .97  | .00  |
| 29                          | .31  | .02  | .01  | .53  | .00  | .00  | .10  | .14  | 1.19  | .22  | .00  | .00  |
| 30                          | .00  | .15  | .66  | .12  | .00  | .00  | .03  | .00  | 3.69  | .00  | .53  | .00  |
| 31                          | .00  |      | .46  | .02  |      | .00  |      | .72  |       | .00  | .00  |      |
| TOTAL                       | 3.61 | 5.74 | 6.40 | 3.80 | 1.95 | 2.71 | 4.40 | 5.93 | 10.67 | 3.12 | 4.04 | 4.93 |
| WATER YEAR 1973 TOTAL=57.30 |      |      |      |      |      |      |      |      |       |      |      |      |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

MEAN AREAL PRECIPITATION, IN INCHES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

| DAY                         | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1                           | .00  | 1.29 | .03  | .14  | .00  | .00  | .09  | .52  | .35  | .59  | .00  | .07  |
| 2                           | .08  | .42  | .00  | .00  | .00  | .14  | .27  | .00  | .00  | .02  | .00  | .00  |
| 3                           | .92  | .18  | .00  | .04  | .00  | .00  | .01  | .41  | .00  | .01  | .00  | .84  |
| 4                           | .00  | .00  | .01  | .04  | .00  | .12  | .06  | .14  | .00  | .95  | .16  | .12  |
| 5                           | .78  | .00  | .41  | .02  | .00  | .62  | .33  | .00  | .00  | .01  | .00  | .00  |
| 6                           | .00  | .06  | .25  | .04  | .00  | .00  | .03  | .13  | .00  | .00  | .00  | .00  |
| 7                           | .00  | .00  | .00  | .05  | .34  | .00  | .34  | .15  | .00  | .31  | .00  | .00  |
| 8                           | .00  | .07  | .00  | .07  | .00  | .00  | .02  | .00  | .00  | .00  | .00  | .00  |
| 9                           | .00  | .01  | .49  | .16  | .00  | .00  | .92  | .03  | .00  | .60  | .00  | .00  |
| 10                          | .00  | .04  | .00  | .10  | .00  | .23  | .00  | .47  | .00  | .15  | .00  | .03  |
| 11                          | .00  | .00  | .00  | .35  | .11  | .01  | .02  | .00  | .10  | .13  | .00  | .00  |
| 12                          | .00  | .00  | .00  | .00  | .02  | .00  | .03  | .92  | .00  | .00  | .00  | .08  |
| 13                          | .03  | .01  | .09  | .01  | .02  | .01  | .14  | .09  | .01  | .00  | .00  | .00  |
| 14                          | .10  | .00  | 1.32 | .01  | .00  | .02  | .47  | .00  | .03  | .00  | .00  | .00  |
| 15                          | .09  | .68  | .00  | .03  | .00  | .00  | .12  | .00  | .00  | .67  | .00  | .00  |
| 16                          | .28  | .72  | .07  | .28  | .00  | 1.15 | .03  | .00  | .11  | .00  | .00  | .00  |
| 17                          | .01  | .10  | 1.41 | .00  | .07  | .91  | .00  | .18  | 1.89 | .00  | 1.01 | .23  |
| 18                          | .00  | .02  | .07  | .01  | .02  | .05  | .00  | .00  | .01  | .02  | .01  | .04  |
| 19                          | .00  | .00  | .00  | .08  | .83  | .13  | .00  | .00  | .03  | .78  | .07  | .00  |
| 20                          | .06  | .00  | .40  | .00  | .03  | .00  | .00  | .00  | .06  | .00  | .00  | .31  |
| 21                          | .00  | .00  | 2.45 | .48  | .00  | 1.22 | .00  | .01  | .02  | .00  | .00  | .51  |
| 22                          | .00  | .23  | .01  | .02  | 1.64 | .04  | .31  | .14  | .04  | .00  | .00  | .04  |
| 23                          | .00  | .01  | .11  | .15  | .31  | .00  | .33  | 1.46 | .00  | .01  | .00  | .00  |
| 24                          | .00  | .26  | .00  | .03  | .01  | .30  | 1.04 | .49  | .21  | .08  | .18  | .00  |
| 25                          | .00  | .09  | .08  | .00  | .00  | .00  | .00  | .42  | .06  | .00  | .00  | .18  |
| 26                          | .00  | .00  | .37  | .00  | .00  | .05  | .00  | .61  | .40  | .00  | .00  | .04  |
| 27                          | .00  | .33  | .67  | .20  | .00  | .00  | .00  | .07  | .15  | .00  | .38  | .00  |
| 28                          | .00  | .27  | .21  | .30  | .00  | .00  | .00  | .12  | .00  | .12  | .04  | .08  |
| 29                          | .00  | .12  | .00  | .13  | .00  | .00  | .36  | .05  | .03  | .91  | .47  | 1.52 |
| 30                          | .40  | .26  | .00  | .01  | .00  | .13  | .06  | .01  | .31  | .76  | .01  | .10  |
| 31                          | .00  |      | .14  | .21  |      | .05  |      | .00  |      | .00  | .01  |      |
| TOTAL                       | 2.75 | 5.17 | 8.59 | 2.96 | 3.40 | 5.18 | 4.98 | 6.50 | 3.81 | 6.12 | 2.34 | 4.19 |
| WATER YEAR 1974 TOTAL=55.99 |      |      |      |      |      |      |      |      |      |      |      |      |

# TABULATION OF DAILY MAX-MIN TEMPERATURES FOR STATION R-3 - WATER YEARS 1960-1974

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

### STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1959 TO SEPTEMBER 1960

| DAY | OCT<br>MAX | OCT<br>MIN | NOV<br>MAX | NOV<br>MIN | DEC<br>MAX | DEC<br>MIN | JAN<br>MAX | JAN<br>MIN | FEB<br>MAX | FEB<br>MIN | MAR<br>MAX | MAR<br>MIN | APR<br>MAX | APR<br>MIN | MAY<br>MAX | MAY<br>MIN | JUN<br>MAX | JUN<br>MIN | JUL<br>MAX | JUL<br>MIN | AUG<br>MAX | AUG<br>MIN | SEP<br>MAX | SEP<br>MIN |
|-----|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1   | 61         | 50         | 43         | 33         | 29         | 22         | 30         | 2          | 21         | 15         | 13         | 4          | 42         | 31         | 48         | 39         | 66         | 55         | 75         | 53         | 71         | 41         | 75         | 54         |
| 2   | 49         | 36         | 37         | 28         | 33         | 24         | 32         | 3          | 20         | 14         | 16         | -2         | 42         | 32         | 51         | 42         | 73         | 56         | 73         | 53         | 74         | 54         | 64         | 47         |
| 3   | 59         | 46         | 47         | 27         | 40         | 26         | 33         | 14         | 23         | 9          | 22         | -1         | 40         | 32         | 58         | 40         | 71         | 56         | 66         | 51         | 72         | 44         | 65         | 42         |
| 4   | 60         | 49         | 59         | 35         | 39         | 30         | 23         | 9          | 33         | 10         | 27         | 19         | 37         | 29         | 76         | 40         | 78         | 62         | 60         | 46         | 59         | 44         | 63         | 39         |
| 5   | 62         | 49         |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |
| 6   | 57         | 49         | 63         | 37         | 39         | 33         | 22         | -8         | 37         | 27         | 24         | 15         | 29         | 21         | 77         | 41         | 66         | 49         | 65         | 50         | 73         | 51         | 70         | 34         |
| 7   | 49         | 47         | 37         | 26         | 41         | 33         | 19         | 8          | 36         | 10         | 27         | 15         | 38         | 18         | 69         | 48         | 59         | 40         | 72         | 52         | 74         | 49         | 82         | 44         |
| 8   | 57         | 49         | 36         | 21         | 42         | 33         | 3          | 4          | 18         | 2          | 19         | -1         | 38         | 16         | 66         | 50         | 60         | 36         | 72         | 44         | 76         | 56         | 87         | 56         |
| 9   | 53         | 48         | 36         | 19         | 40         | 30         | 0          | -2         | 31         | 11         | 17         | -1         | 34         | 28         | 66         | 55         | 66         | 34         | 71         | 52         | 65         | 43         | 82         | 58         |
| 10  | 57         | 39         | 45         | 21         | 27         | 23         | 4          | -2         | 37         | 16         | 13         | 0          | 31         | 19         | 63         | 49         | 75         | 40         | 79         | 42         | 59         | 47         | 65         | 44         |
| 11  | 57         | 38         | 40         | 27         | 28         | 13         | 13         | -8         | 42         | 32         | 9          | -1         | 47         | 14         | 61         | 44         | 75         | 40         | 82         | 56         | 71         | 47         | 55         | 42         |
| 12  | 55         | 37         | 46         | 32         | 33         | 19         | 24         | -6         | 32         | 8          | 23         | -1         | 47         | 32         | 66         | 52         | 71         | 48         | 83         | 58         | 73         | 44         | 55         | 49         |
| 13  | 37         | 28         | 45         | 34         | 34         | 21         | 4          | 4          | 13         | 3          | 27         | -1         | 41         | 31         | 67         | 53         | 73         | 44         | 78         | 58         | 75         | 48         | 64         | 49         |
| 14  | 41         | 33         | 61         | 38         | 33         | 9          | 3          | 6          | 29         | 9          | 27         | 20         | 52         | 32         | 68         | 47         | 69         | 46         | 65         | 51         | 75         | 56         | 60         | 43         |
| 15  | 44         | 20         | 39         | 21         | 29         | 8          | 31         | 14         | 16         | 8          | 31         | 18         | 58         | 30         | 53         | 47         | 59         | 47         | 73         | 44         | 66         | 54         | 59         | 38         |
| 16  | 47         | 30         | 45         | 18         | 40         | 29         | 27         | 10         | 32         | 14         | 36         | 8          | 55         | 29         | 59         | 50         | 75         | 56         | 75         | 46         | 73         | 48         | 58         | 30         |
| 17  | 49         | 37         | 40         | 24         | 35         | 28         | 19         | 10         | 35         | 22         | 39         | 18         | 63         | 42         | 65         | 46         | 83         | 59         | 71         | 49         | 77         | 42         | 59         | 29         |
| 18  | 37         | 25         | 26         | 17         | 39         | 16         | 31         | 11         | 41         | 20         | 36         | 24         | 64         | 27         | 67         | 48         | 68         | 48         | 71         | 60         | 81         | 45         | 61         | 44         |
| 19  | 31         | 20         | 20         | 16         | 30         | 15         | 27         | 18         | 34         | 22         | 31         | 23         | 41         | 27         | 71         | 44         | 69         | 51         | 68         | 59         | 81         | 49         | 49         | 42         |
| 20  | 49         | 32         | 29         | 15         | 16         | 3          | 19         | 15         | 27         | 19         | 35         | 22         | 48         | 24         | 75         | 38         | 51         | 50         | 64         | 53         | 69         | 63         | 56         | 48         |
| 21  | 35         | 17         | 34         | 26         | 14         | -6         | 21         | 13         | 20         | 4          | 27         | 10         | 59         | 34         | 74         | 42         | 69         | 46         | 69         | 50         | 72         | 60         | 57         | 48         |
| 22  | 41         | 16         | 39         | 33         | 12         | -12        | 23         | 17         | 31         | -3         | 29         | -2         | 50         | 38         | 58         | 47         | 76         | 40         | 73         | 44         | 77         | 59         | 66         | 43         |
| 23  | 50         | 35         | 41         | 33         | 12         | -10        | 24         | 17         | 23         | 15         | 23         | 13         | 61         | 36         | 60         | 47         | 77         | 55         | 77         | 59         | 69         | 52         | 66         | 44         |
| 24  | 62         | 50         | 46         | 41         | 32         | -8         | 19         | 6          | 23         | 15         | 29         | 12         | 45         | 33         | 56         | 51         | 67         | 57         | 67         | 48         | 59         | 42         | 65         | 50         |
| 25  | 59         | 48         | 56         | 32         | 24         | -2         | 23         | 7          | 30         | 16         | 18         | -7         | 52         | 40         | 67         | 48         | 62         | 55         | 77         | 46         | 67         | 34         | 60         | 44         |
| 26  | 51         | 41         | 32         | 19         | 27         | 21         | 26         | 11         | 41         | 26         | 25         | -15        | 59         | 32         | 76         | 46         | 76         | 56         | 77         | 47         | 75         | 37         | 68         | 40         |
| 27  | 46         | 31         | 40         | 21         | 25         | 16         | 21         | 8          | 25         | 17         | 36         | 21         | 45         | 32         | 84         | 48         | 79         | 51         | 65         | 58         | 73         | 50         | 71         | 46         |
| 28  | 30         | 24         | 41         | 29         | 27         | 22         | 26         | 20         | 23         | 13         | 36         | 22         | 56         | 36         | 80         | 57         | 82         | 50         | 78         | 52         | 79         | 42         | 69         | 52         |
| 29  | 32         | 20         | 29         | 16         | 27         | 22         | 27         | 19         | 18         | 1          | 42         | 16         | 61         | 34         | 79         | 48         | 79         | 54         | 85         | 53         | 82         | 48         | 65         | 50         |
| 30  | 34         | 15         | 24         | 10         | 27         | 21         | 28         | 7          |            |            | 43         | 34         | 65         | 42         | 75         | 50         | 78         | 59         | 66         | 56         | 74         | 50         | 66         | 50         |
| 31  | 43         | 33         |            |            | 27         | 9          | 28         | 11         |            |            | 51         | 41         |            |            | 52         | 52         |            |            | 67         | 47         | 75         | 45         |            |            |
| AVG | 48         | 34         | 41         | 27         | 29         | 16         | 24         | 7          | 29         | 13         | 27         | 12         | 48         | 30         | 67         | 46         | 71         | 50         | 72         | 51         | 72         | 48         | 65         | 45         |
| MAX | 69         | 50         | 63         | 47         | 41         | 33         | 35         | 32         | 42         | 32         | 51         | 41         | 65         | 42         | 84         | 57         | 83         | 62         | 85         | 60         | 82         | 63         | 87         | 58         |
| MIN | 30         | 15         | 24         | 10         | 12         | -10        | 0          | -20        | 13         | -3         | 9          | -15        | 29         | 14         | 48         | 30         | 59         | 34         | 60         | 42         | 59         | 34         | 55         | 29         |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1960 TO SEPTEMBER 1961

| DAY | OCT<br>MAX | OCT<br>MIN | NOV<br>MAX | NOV<br>MIN | DEC<br>MAX | DEC<br>MIN | JAN<br>MAX | JAN<br>MIN | FEB<br>MAX | FEB<br>MIN | MAR<br>MAX | MAR<br>MIN | APR<br>MAX | APR<br>MIN | MAY<br>MAX | MAY<br>MIN | JUN<br>MAX | JUN<br>MIN | JUL<br>MAX | JUL<br>MIN | AUG<br>MAX | AUG<br>MIN | SEP<br>MAX | SEP<br>MIN |
|-----|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1   | 49         | 29         | 49         | 41         | 15         | 7          | 27         | 12         | -8         | -21        | 30         | 11         | 36         | 27         | 52         | 27         | 67         | 46         | 66         | 48         | 69         | 44         | 84         | 57         |
| 2   | 50         | 25         | 53         | 41         | 23         | 17         | 17         | 12         | 21         | -20        | 32         | 18         | 33         | 24         | 52         | 28         | 69         | 52         | 61         | 43         | 65         | 41         | 70         | 65         |
| 3   | 53         | 38         | 44         | 36         | 31         | 17         | 19         | 5          | 27         | 11         | 46         | 21         | 28         | 24         | 33         | 24         | 67         | 48         | 74         | 50         | 62         | 52         | 80         | 64         |
| 4   | 50         | 30         | 37         | 33         | 40         | 17         | 15         | 5          | 20         | 8          | 35         | 24         | 38         | 28         | 44         | 29         | 64         | 44         | 60         | 46         | 78         | 54         | 82         | 65         |
| 5   | 55         | 25         | 35         | 30         | 48         | 26         | 14         | 0          | 24         | 8          | 30         | 24         | 40         | 30         | 40         | 24         | 76         | 51         | 64         | 48         | 75         | 53         | 79         | 56         |
| 6   | 56         | 46         | 31         | 27         | 48         | 34         | 30         | 5          | 23         | 7          | 27         | 23         | 38         | 32         | 56         | 24         | 64         | 38         | 67         | 42         | 79         | 54         | 76         | 56         |
| 7   | 47         | 39         | 30         | 21         | 42         | 20         | 33         | 28         | 22         | 0          | 32         | 19         | 37         | 27         | 40         | 38         | 56         | 33         | 70         | 48         | 72         | 56         | 69         | 56         |
| 8   | 53         | 34         | 38         | 14         | 19         | 2          | 31         | 12         | 35         | 5          | 28         | 10         | 30         | 24         | 68         | 37         | 71         | 44         | 67         | 52         | 76         | 51         | 77         | 56         |
| 9   | 55         | 27         | 40         | 30         | 19         | -4         | 13         | 13         | 38         | 16         | 24         | 8          | 44         | 22         | 62         | 46         | 70         | 54         | 67         | 50         | 80         | 58         | 78         | 50         |
| 10  | 56         | 26         | 45         | 33         | 22         | -4         | 16         | -2         | 31         | 15         | 12         | 4          | 30         | 26         | 60         | 36         | 68         | 56         | 62         | 49         | 82         | 58         | 80         | 56         |
| 11  | 55         | 32         | 33         | 22         | 10         | -8         | 30         | 0          | 25         | 2          | 21         | -3         | 30         | 27         | 66         | 31         | 72         | 38         | 74         | 47         | 73         | 60         | 81         | 64         |
| 12  | 50         | 31         | 39         | 22         | 4          | -12        | 12         | -8         | 29         | 4          | 32         | 0          | 40         | 27         | 65         | 43         | 82         | 54         | 77         | 53         | 72         | 53         | 76         | 54         |
| 13  | 52         | 26         | 43         | 30         | 2          | -6         | 30         | -2         | 32         | 0          | 36         | 8          | 30         | 27         | 78         | 53         | 80         | 59         | 80         | 56         | 58         | 47         | 57         | 50         |
| 14  | 45         | 37         | 51         | 28         | 16         | -8         | 38         | 10         | 36         | 21         | 24         | 18         | 32         | 26         | 81         | 55         | 62         | 39         | 70         | 55         | 61         | 41         | 77         | 57         |
| 15  | 60         | 41         | 47         | 37         | 28         | 14         | 34         | 7          | 26         | -2         | 31         | 19         | 46         | 24         | 85         | 56         | 52         | 38         | 62         | 55         | 76         | 41         | 68         | 42         |
| 16  | 51         | 43         | 55         | 45         | 32         | 18         | 28         | 8          | 20         | -5         | 27         | 5          | 38         | 29         | 66         | 44         | 64         | 36         | 61         | 50         | 57         | 43         | 58         | 32         |
| 17  | 63         | 41         | 45         | 27         | 19         | 9          | 36         | -9         | 26         | -3         | 6          | -5         | 42         | 28         | 50         | 30         | 72         | 45         | 77         | 54         | 67         | 41         | 64         | 31         |
| 18  | 51         | 29         | 45         | 29         | 23         | 7          | 31         | -9         | 35         | 27         | 3          | -7         | 44         | 27         | 57         | 29         | 70         | 45         | 74         | 54         | 74         | 42         | 69         | 34         |
| 19  | 49         | 38         | 47         | 25         | 22         | 4          | 6          | -20        | 22         | 24         | 3          | -19        | 38         | 24         | 54         | 38         | 74         | 46         | 54         | 54         | 80         | 48         | 72         | 38         |
| 20  | 44         | 33         | 36         | 22         | 19         | 4          | 2          | -6         | 52         | 3          | 24         | 8          | 52         | 26         | 55         | 36         | 68         | 43         | 73         | 54         | 79         | 54         | 73         | 48         |
| 21  | 35         | 21         | 47         | 29         | 32         | 10         | 9          | -10        | 34         | 3          | 36         | -3         | 58         | 24         | 54         | 42         | 68         | 54         | 76         | 55         | 61         | 55         | 60         | 56         |
| 22  | 45         | 20         | 49         | 32         | 18         | 8          | 6          | -18        | 32         | 16         | 51         | -2         | 46         | 35         | 56         | 42         | 67         | 54         | 81         | 56         | 60         | 48         | 78         | 54         |
| 23  | 44         | 28         | 41         | 27         | 8          | -6         | 10         | -16        | 39         | 30         | 48         | 10         | 52         | 34         | 50         | 38         | 75         | 50         | 78         | 56         | 63         | 52         | 82         | 53         |
| 24  | 46         | 36         | 31         | 14         | 13         | -10        | -6         | -13        | 34         | 32         | 46         | 28         | 47         | 28         | 56         | 40         | 66         | 52         | 82         | 61         | 67         | 57         | 80         | 60         |
| 25  | 40         | 35         | 34         | 16         | 26         | -9         | -2         | -15        | 38         | 31         | 32         | 26         | 42         | 32         | 73         | 44         | 70         | 42         | 80         | 62         | 76         | 59         | 76         | 56         |
| 26  | 49         | 31         | 42         | 19         | 33         | 12         | 2          | -14        | 38         | 17         | 38         | 19         | 40         | 28         | 56         | 34         | 59         | 46         | 76         | 52         | 68         | 60         | 74         | 56         |
| 27  | 59         | 30         | 41         | 32         | 11         | -12        | 14         | -6         | 36         | 18         | 32         | 22         | 47         | 27         | 39         | 34         | 70         | 45         | 73         | 48         | 74         | 53         | 66         | 42         |
| 28  | 60         | 30         | 31         | 23         | 13         | -17        | 13         | -4         | 34         | 16         | 57         | 32         | 54         | 30         | 64         | 38         | 75         | 46         | 76         | 54         | 66         | 56         | 54         | 39         |
| 29  | 59         | 32         | 38         | 23         | 16         | -5         | 16         | -2         | 39         | 18         | 39         | 18         | 40         | 30         | 48         | 34         | 50         | 52         | 75         | 56         | 62         | 54         | 50         | 31         |
| 30  | 59         | 34         | 26         | 16         | 28         | 13         | 8          | -16        | 28         | 13         | 29         | 18         | 40         | 28         | 41         | 24         | 72         | 53         | 74         | 55         | 74         | 54         | 61         | 30         |
| 31  | 48         | 30         | 30         | 16         | 30         | 23         | 8          | -9         | 40         | 12         | 40         | 12         | 56         | 24         | 56         | 24         | 72         | 68         | 48         | 48         | 74         | 57         | 72         | 30         |
| AVG | 51         | 32         | 41         | 28         | 23         | 34         | 17         | -2         | 30         | 9          | 34         | 14         | 40         | 35         | 56         | 36         | 69         | 47         | 72         | 52         | 70         | 51         | 72         | 50         |
| MAX | 63         | 46         | 55         | 45         | 48         | 34         | 38         | 28         | 52         | 32         | 57         | 32         | 58         | 35         | 85         | 56         | 82         | 59         | 82         | 62         | 82         | 60         | 84         | 65         |
| MIN | 35         | 20         | 26         | 14         | 2          | -17        | -2         | -20        | -8         | -21        | 6          | -7         | 28         | 22         | 33         | 24         | 52         | 33         | 60         | 42         | 57         | 41         | 50         | 30         |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1961 TO SEPTEMBER 1962

| DAY | OCT |     | NOV |     | DEC |     | JAN |     | FEB |     | MAR |     | APR |     | MAY |     | JUN |     | JUL |     | AUG |     | SEP |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1   | 67  | 44  | 34  | 28  | 27  | 11  | 20  | -5  | -5  | -26 | 27  | 7   | 36  | 32  | 54  | 34  | 74  | 51  | 66  | 47  | 70  | 58  | 76  | 59  |
| 2   | 62  | 44  | 42  | 19  | 33  | 14  | 18  | -5  | 10  | -26 | -11 | 3   | 35  | 14  | 39  | 34  | 54  | 43  | 64  | 40  | 68  | 48  | 65  | 47  |
| 3   | 52  | 39  | 56  | 36  | 32  | 26  | 26  | -6  | 25  | 11  | 8   | -8  | 31  | 12  | 38  | 34  | 62  | 40  | 66  | 37  | 72  | 46  | 68  | 44  |
| 4   | 40  | 39  | 54  | 44  | 34  | 26  | 27  | -14 | 27  | 13  | 25  | 12  | 38  | 12  | 42  | 34  | 70  | 40  | 67  | 38  | 72  | 46  | 69  | 43  |
| 5   | 52  | 28  | 54  | 46  | 40  | 28  | 19  | -7  | 44  | 29  | 32  | 24  | 48  | 20  | 46  | 32  | 60  | 50  | 56  | 40  | 74  | 54  | 52  | 49  |
| 6   | 69  | 39  | 48  | 40  | 33  | 20  | 30  | 19  | 27  | -14 | 34  | 23  | 55  | 26  | 48  | 30  | 64  | 48  | 66  | 37  | 75  | 58  | 54  | 34  |
| 7   | 72  | 44  | 41  | 32  | 31  | 24  | 37  | 27  | 16  | -15 | 38  | 14  | 46  | 35  | 45  | 28  | 68  | 43  | 71  | 41  | 69  | 61  | 62  | 34  |
| 8   | 72  | 50  | 36  | 28  | 29  | 13  | 36  | 22  | 19  | -10 | 41  | 9   | 50  | 37  | 43  | 30  | 68  | 41  | 77  | 44  | 68  | 52  | 65  | 38  |
| 9   | 70  | 47  | 28  | 24  | 26  | 13  | 21  | 8   | 26  | -4  | 43  | 12  | 60  | 34  | 46  | 36  | 71  | 40  | 72  | 37  | 58  | 52  | 66  | 42  |
| 10  | 68  | 42  | 24  | 14  | 30  | 14  | 10  | 1   | 9   | -12 | 48  | 16  | 38  | 33  | 51  | 30  | 73  | 50  | 66  | 30  | 57  | 47  | 68  | 56  |
| 11  | 55  | 45  | 30  | 15  | 33  | 25  | 17  | -10 | 14  | -15 | 46  | 16  | 46  | 29  | 52  | 26  | 70  | 52  | 69  | 53  | 58  | 48  | 63  | 52  |
| 12  | 66  | 45  | 36  | 16  | 33  | 18  | 22  | -5  | 18  | -26 | 32  | 24  | 52  | 33  | 57  | 26  | 64  | 48  | 76  | 53  | 70  | 48  | 52  | 45  |
| 13  | 70  | 44  | 44  | 33  | 35  | 15  | 17  | -1  | 25  | 5   | 35  | 25  | 52  | 33  | 53  | 30  | 68  | 44  | 64  | 33  | 68  | 55  | 71  | 45  |
| 14  | 36  | 33  | 51  | 37  | 24  | 10  | 23  | 12  | 24  | 5   | 36  | 21  | 52  | 26  | 44  | 35  | 74  | 41  | 70  | 34  | 61  | 49  | 67  | 47  |
| 15  | 33  | 26  | 47  | 26  | 19  | -3  | 42  | 15  | 27  | 5   | 33  | 25  | 40  | 28  | 50  | 41  | 79  | 53  | 66  | 52  | 69  | 49  | 60  | 41  |
| 16  | 34  | 25  | 44  | 24  | 14  | -11 | 32  | 4   | 28  | 4   | 40  | 24  | 34  | 23  | 59  | 44  | 78  | 52  | 68  | 52  | 71  | 47  | 54  | 40  |
| 17  | 38  | 26  | 45  | 32  | 16  | -1  | 16  | -12 | 25  | 8   | 37  | 24  | 36  | 22  | 76  | 42  | 75  | 51  | 68  | 47  | 66  | 52  | 58  | 48  |
| 18  | 42  | 31  | 31  | 21  | 25  | 20  | 14  | -20 | 15  | -4  | 32  | 9   | 41  | 16  | 84  | 48  | 62  | 40  | 68  | 38  | 60  | 41  | 58  | 45  |
| 19  | 42  | 27  | 29  | 14  | 28  | 20  | 14  | 10  | 15  | -9  | 32  | 4   | 48  | 16  | 84  | 34  | 68  | 48  | 68  | 38  | 66  | 42  | 54  | 37  |
| 20  | 63  | 44  | 27  | 13  | 30  | 22  | 19  | 5   | 24  | 8   | 44  | 8   | 51  | 24  | 72  | 50  | 60  | 49  | 72  | 47  | 76  | 54  | 46  | 30  |
| 21  | 53  | 35  | 27  | 24  | 21  | 15  | 19  | -3  | 21  | 2   | 40  | 24  | 55  | 24  | 60  | 43  | 71  | 44  | 70  | 56  | 71  | 46  | 45  | 30  |
| 22  | 51  | 33  | 24  | 26  | 15  | 9   | 18  | 20  | 26  | 10  | 46  | 18  | 51  | 29  | 60  | 39  | 72  | 49  | 69  | 48  | 66  | 47  | 48  | 28  |
| 23  | 50  | 33  | 34  | 30  | 18  | 14  | 20  | 6   | 28  | 14  | 36  | 13  | 51  | 30  | 66  | 46  | 70  | 55  | 66  | 46  | 69  | 46  | 56  | 34  |
| 24  | 54  | 30  | 35  | 30  | 20  | 14  | 24  | 14  | 28  | -2  | 40  | 10  | 51  | 28  | 64  | 34  | 63  | 53  | 66  | 46  | 73  | 46  | 58  | 34  |
| 25  | 57  | 26  | 35  | 26  | 18  | 15  | 30  | 20  | 25  | -6  | 34  | 30  | 47  | 22  | 62  | 38  | 69  | 54  | 72  | 44  | 73  | 46  | 59  | 35  |
| 26  | 54  | 31  | 46  | 21  | 26  | 14  | 32  | 0   | 27  | 15  | 40  | 32  | 61  | 28  | 60  | 38  | 68  | 49  | 65  | 49  | 76  | 51  | 56  | 46  |
| 27  | 55  | 34  | 42  | 20  | 30  | 17  | 35  | 2   | 32  | 27  | 40  | 32  | 78  | 40  | 58  | 38  | 74  | 44  | 55  | 51  | 74  | 53  | 54  | 46  |
| 28  | 56  | 36  | 40  | 15  | 32  | 4   | 4   | -1  | 32  | 28  | 50  | 37  | 78  | 42  | 70  | 38  | 70  | 42  | 74  | 51  | 71  | 53  | 52  | 46  |
| 29  | 54  | 33  | 43  | 17  | 33  | 4   | 2   | -23 | 42  | 28  | 57  | 37  | 58  | 37  | 78  | 38  | 79  | 46  | 67  | 65  | 74  | 53  | 51  | 46  |
| 30  | 54  | 33  | 43  | 17  | 33  | 4   | 2   | -16 | 42  | 28  | 57  | 37  | 58  | 37  | 78  | 38  | 79  | 46  | 67  | 65  | 74  | 53  | 51  | 46  |
| 31  | 46  | 33  | 33  | 19  | 19  | 4   | 2   | -7  | 42  | 28  | 57  | 37  | 58  | 37  | 78  | 38  | 79  | 46  | 67  | 65  | 74  | 53  | 51  | 46  |
| AVG | 57  | 36  | 37  | 26  | 26  | 14  | 22  | 0   | 22  | 2   | 38  | 18  | 47  | 27  | 58  | 37  | 70  | 47  | 68  | 49  | 69  | 51  | 59  | 43  |
| MAX | 73  | 50  | 56  | 46  | 40  | 28  | 42  | -27 | 44  | -26 | 66  | 37  | 78  | 42  | 84  | 60  | 80  | 58  | 77  | 59  | 78  | 61  | 76  | 59  |
| MIN | 33  | 23  | 20  | 13  | 14  | -11 | -7  | -23 | -5  | -29 | 7   | -11 | 31  | 12  | 38  | 20  | 54  | 40  | 55  | 37  | 57  | 41  | 46  | 29  |



## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1962 TO SEPTEMBER 1963

| DAY | OCT |     | NOV |     | DEC |     | JAN |     | FEB |     | MAR |     | APR |     | MAY |     | JUN |     | JUL |     | AUG |     | SEP |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1   | 52  | 43  | 37  | 31  | 50  | 30  | 8   | -6  | 19  | -7  | 23  | -2  | 55  | 25  | 46  | 30  | 80  | 45  | 87  | 66  | 72  | 47  | 66  | 44  |
| 2   | 62  | 38  | 44  | 24  | 48  | 28  | 24  | 10  | 25  | -10 | 28  | 14  | 49  | 38  | 48  | 31  | 84  | 49  | 89  | 63  | 66  | 57  | 70  | 45  |
| 3   | 63  | 40  | 36  | 27  | 42  | 28  | 24  | 18  | 25  | -14 | 27  | 16  | 38  | 35  | 63  | 30  | 79  | 47  | 68  | 49  | 75  | 56  | 72  | 51  |
| 4   | 65  | 48  | 36  | 30  | 50  | 32  | 25  | 19  | 20  | -24 | 33  | 16  | 42  | 23  | 72  | 39  | 82  | 56  | 64  | 47  | 69  | 56  | 62  | 38  |
| 5   | 55  | 47  | 32  | 28  | 44  | 30  | 21  | 10  | 26  | 7   | 34  | 14  | 32  | 20  | 57  | 32  | 80  | 57  | 67  | 49  | 68  | 55  | 63  | 36  |
| 6   | 48  | 46  | 27  | 23  | 40  | 34  | 23  | 10  | 26  | 16  | 27  | 15  | 43  | 28  | 58  | 30  | 78  | 58  | 66  | 46  | 74  | 55  | 66  | 38  |
| 7   | 49  | 44  | 40  | 15  | 34  | 26  | 24  | 19  | 21  | -10 | 26  | 17  | 45  | 34  | 57  | 33  | 76  | 48  | 66  | 46  | 75  | 53  | 72  | 47  |
| 8   | 49  | 46  | 46  | 34  | 30  | 26  | 27  | 22  | 1   | -20 | 29  | 6   | 42  | 20  | 62  | 43  | 73  | 47  | 66  | 47  | 75  | 53  | 72  | 46  |
| 9   | 49  | 44  | 47  | 33  | 32  | 22  | 26  | 24  | 17  | -9  | 31  | 7   | 30  | 18  | 72  | 47  | 67  | 44  | 62  | 44  | 74  | 50  | 72  | 48  |
| 10  | 49  | 42  | 46  | 36  | 28  | 20  | 22  | 24  | 23  | 5   | 28  | 14  | 34  | 19  | 44  | 32  | 63  | 34  | 64  | 48  | 72  | 45  | 60  | 42  |
| 11  | 52  | 41  | 44  | 26  | 20  | 3   | 34  | 26  | 25  | 11  | 23  | 10  | 38  | 32  | 38  | 29  | 57  | 39  | 69  | 47  | 63  | 43  | 70  | 38  |
| 12  | 62  | 40  | 32  | 14  | 16  | -1  | 26  | 22  | 23  | 17  | 27  | 19  | 44  | 31  | 52  | 29  | 51  | 48  | 80  | 50  | 68  | 44  | 63  | 38  |
| 13  | 44  | 34  | 30  | 14  | 10  | -6  | 28  | 5   | 18  | 12  | 31  | 25  | 41  | 27  | 64  | 34  | 72  | 46  | 80  | 54  | 59  | 43  | 54  | 34  |
| 14  | 47  | 27  | 27  | 23  | 12  | -12 | 18  | 0   | 18  | 12  | 27  | 15  | 41  | 23  | 63  | 43  | 73  | 44  | 75  | 58  | 59  | 47  | 63  | 31  |
| 15  | 56  | 28  | 29  | 22  | 7   | -10 | 19  | 0   | 12  | -5  | 25  | 4   | 45  | 29  | 62  | 38  | 64  | 49  | 68  | 56  | 65  | 47  | 69  | 34  |
| 16  | 62  | 37  | 36  | 17  | 19  | 0   | 13  | -8  | 0   | -11 | 32  | -1  | 53  | 32  | 70  | 37  | 65  | 44  | 72  | 56  | 62  | 43  | 74  | 36  |
| 17  | 60  | 34  | 34  | 23  | 17  | 2   | 24  | 3   | 13  | -14 | 30  | 25  | 52  | 35  | 73  | 39  | 71  | 44  | 78  | 52  | 64  | 40  | 76  | 45  |
| 18  | 52  | 32  | 32  | 19  | 20  | 4   | 30  | 14  | 32  | 13  | 31  | 19  | 52  | 29  | 54  | 46  | 70  | 45  | 79  | 57  | 58  | 43  | 78  | 48  |
| 19  | 62  | 34  | 34  | 14  | 26  | -17 | 29  | 17  | 37  | 29  | 33  | 16  | 46  | 27  | 66  | 44  | 75  | 41  | 78  | 60  | 68  | 43  | 72  | 48  |
| 20  | 63  | 40  | 33  | 15  | 18  | -11 | 24  | 22  | 31  | 18  | 28  | 21  | 58  | 39  | 57  | 38  | 70  | 53  | 61  | 57  | 68  | 49  | 54  | 38  |
| 21  | 50  | 38  | 36  | 27  | 9   | -18 | 23  | 2   | 25  | 7   | 35  | 17  | 55  | 34  | 67  | 38  | 62  | 45  | 76  | 56  | 75  | 55  | 56  | 36  |
| 22  | 48  | 34  | 38  | 28  | 18  | 6   | 10  | -6  | 7   | -9  | 29  | 19  | 38  | 27  | 60  | 41  | 56  | 44  | 78  | 53  | 77  | 56  | 50  | 38  |
| 23  | 49  | 36  | 31  | 20  | 20  | 11  | 21  | 0   | 14  | -1  | 28  | 11  | 39  | 27  | 42  | 33  | 74  | 43  | 81  | 56  | 74  | 56  | 47  | 31  |
| 24  | 36  | 30  | 34  | 22  | 19  | -6  | 0   | -6  | 23  | 4   | 42  | 10  | 37  | 26  | 60  | 31  | 84  | 55  | 86  | 58  | 62  | 46  | 58  | 29  |
| 25  | 39  | 24  | 34  | 15  | 15  | -4  | 9   | -13 | 19  | 6   | 53  | 29  | 40  | 31  | 67  | 34  | 84  | 55  | 89  | 66  | 59  | 45  | 68  | 31  |
| 26  | 34  | 26  | 39  | 14  | 24  | -2  | 12  | -8  | 12  | -6  | 57  | 35  | 40  | 29  | 72  | 37  | 85  | 58  | 86  | 61  | 66  | 43  | 72  | 38  |
| 27  | 38  | 26  | 45  | 19  | 16  | -8  | 19  | 7   | 19  | -9  | 45  | 31  | 44  | 31  | 76  | 41  | 93  | 56  | 88  | 59  | 64  | 44  | 60  | 46  |
| 28  | 34  | 33  | 53  | 25  | 20  | 2   | 7   | -3  | 22  | 6   | 37  | 23  | 53  | 30  | 70  | 42  | 84  | 58  | 85  | 62  | 69  | 41  | 53  | 34  |
| 29  | 34  | 26  | 48  | 30  | 22  | 2   | 15  | -5  | 22  | 6   | 42  | 17  | 66  | 29  | 62  | 51  | 79  | 56  | 84  | 63  | 56  | 50  | 44  | 40  |
| 30  | 34  | 22  | 54  | 30  | 13  | -18 | 18  | -7  | 13  | 6   | 51  | 13  | 47  | 29  | 67  | 57  | 86  | 69  | 89  | 64  | 64  | 51  | 48  | 28  |
| 31  | 42  | 32  |     |     | -2  | -18 | 15  | -6  |     |     | 43  | 25  |     |     | 73  | 48  |     | 60  | 72  | 42  | 66  | 49  |     |     |
| AVG | 50  | 38  | 38  | 23  | 24  | 7   | 20  | 7   | 19  | 1   | 33  | 17  | 45  | 29  | 61  | 38  | 74  | 49  | 76  | 54  | 67  | 49  | 63  | 39  |
| MAX | 68  | 46  | 54  | 36  | 50  | 34  | 34  | -26 | 37  | -29 | 57  | 35  | 66  | 39  | 76  | 51  | 86  | 60  | 89  | 66  | 77  | 49  | 78  | 51  |
| MIN | 34  | 22  | 27  | 14  | -2  | -18 | 0   | -13 | 0   | -24 | 23  | -2  | 30  | 18  | 38  | 29  | 51  | 34  | 62  | 42  | 56  | 40  | 44  | 28  |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1963 TO SEPTEMBER 1964

| DAY | OCT |     | NOV |     | DEC |     | JAN |     | FEB |     | MAR |     | APR |     | MAY |     | JUN |     | JUL |     | AUG |     | SEP |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1   | 61  | 27  | 44  | 36  | 15  | 5   | 22  | -6  | 30  | 24  | 40  | 12  | 26  | -2  | 68  | 34  | 62  | 41  | 84  | 58  | 72  | 40  | 62  | 42  |
| 2   | 74  | 40  | 41  | 32  | 24  | 5   | 28  | 17  | 30  | 4   | 43  | 28  | 34  | 4   | 68  | 32  | 64  | 38  | 80  | 58  | 66  | 50  | 65  | 42  |
| 3   | 66  | 44  | 32  | 28  | 25  | 15  | 32  | 26  | 10  | 0   | 52  | 26  | 35  | 22  | 72  | 32  | 65  | 36  | 76  | 58  | 70  | 46  | 64  | 42  |
| 4   | 49  | 35  | 42  | 28  | 21  | 16  | 34  | 15  | 26  | 12  | 49  | 27  | 22  | 12  | 72  | 40  | 57  | 43  | 73  | 58  | 74  | 44  | 60  | 50  |
| 5   | 66  | 34  | 46  | 32  | 25  | 5   | 17  | 0   | 32  | 24  | 50  | 37  | 38  | 3   | 72  | 40  | 58  | 36  | 68  | 56  | 66  | 50  | 64  | 49  |
| 6   | 75  | 38  | 43  | 36  | 22  | 5   | 29  | 0   | 32  | 12  | 31  | 14  | 42  | 14  | 74  | 40  | 72  | 34  | 72  | 56  | 66  | 44  | 64  | 46  |
| 7   | 80  | 50  | 53  | 42  | 29  | 17  | 30  | 12  | 30  | 28  | 48  | 14  | 52  | 32  | 80  | 46  | 70  | 46  | 72  | 52  | 76  | 42  | 70  | 46  |
| 8   | 55  | 36  | 53  | 46  | 34  | 18  | 28  | 6   | 30  | 16  | 34  | 26  | 54  | 35  | 76  | 52  | 76  | 52  | 78  | 51  | 71  | 52  | 78  | 46  |
| 9   | 49  | 25  | 46  | 40  | 37  | 26  | 30  | 10  | 14  | -2  | 34  | 21  | 34  | 28  | 73  | 56  | 76  | 50  | 74  | 48  | 52  | 39  | 72  | 52  |
| 10  | 61  | 28  | 41  | 38  | 27  | 11  | 31  | 10  | 15  | -14 | 22  | 16  | 46  | 28  | 56  | 47  | 76  | 45  | 76  | 42  | 64  | 40  | 92  | 54  |
| 11  | 60  | 36  | 38  | 34  | 14  | -4  | 9   | -4  | 24  | -8  | 28  | 12  | 46  | 28  | 58  | 44  | 69  | 42  | 78  | 50  | 72  | 48  | 67  | 46  |
| 12  | 49  | 35  | 42  | 33  | 12  | -2  | 6   | -10 | 33  | 2   | 26  | 14  | 56  | 26  | 70  | 42  | 76  | 50  | 78  | 55  | 72  | 56  | 56  | 32  |
| 13  | 52  | 31  | 38  | 33  | 20  | 9   | 5   | -6  | 34  | 12  | 30  | 10  | 62  | 32  | 74  | 46  | 72  | 50  | 68  | 59  | 59  | 40  | 60  | 29  |
| 14  | 66  | 31  | 36  | 27  | 24  | 6   | 18  | -3  | 26  | 10  | 38  | 12  | 52  | 46  | 54  | 40  | 64  | 48  | 74  | 57  | 60  | 38  | 66  | 34  |
| 15  | 73  | 43  | 35  | 26  | 10  | 2   | 16  | 2   | 26  | 0   | 38  | 24  | 54  | 36  | 66  | 34  | 64  | 43  | 74  | 56  | 56  | 44  | 54  | 30  |
| 16  | 72  | 44  | 36  | 26  | 6   | -1  | 22  | 0   | 22  | 4   | 26  | 7   | 46  | 34  | 74  | 44  | 56  | 38  | 78  | 51  | 70  | 44  | 52  | 30  |
| 17  | 67  | 45  | 40  | 26  | 7   | -6  | 22  | 6   | 18  | -2  | 34  | 4   | 44  | 30  | 66  | 48  | 62  | 42  | 80  | 54  | 70  | 50  | 60  | 34  |
| 18  | 73  | 44  | 53  | 40  | 12  | -3  | 28  | 12  | 35  | 2   | 24  | 10  | 61  | 36  | 64  | 42  | 72  | 40  | 81  | 59  | 68  | 46  | 80  | 37  |
| 19  | 75  | 46  | 43  | 37  | 8   | -15 | 35  | 24  | 30  | 10  | 22  | 12  | 46  | 28  | 68  | 45  | 84  | 49  | 78  | 54  | 63  | 42  | 60  | 30  |
| 20  | 76  | 47  | 46  | 33  | 1   | -13 | 38  | 27  | 34  | 14  | 36  | 18  | 38  | 28  | 60  | 35  | 86  | 60  | 76  | 48  | 60  | 43  | 61  | 29  |
| 21  | 55  | 33  | 44  | 39  | 4   | -13 | 37  | 30  | 16  | 4   | 38  | 16  | 54  | 31  | 60  | 26  | 81  | 58  | 84  | 58  | 64  | 47  | 66  | 36  |
| 22  | 50  | 27  | 52  | 43  | 15  | -2  | 34  | 16  | 14  | 0   | 40  | 22  | 38  | 36  | 80  | 40  | 32  | 52  | 83  | 62  | 52  | 47  | 68  | 38  |
| 23  | 67  | 31  | 54  | 34  | 16  | -6  | 32  | 14  | 30  | -10 | 34  | 14  | 44  | 36  | 86  | 60  | 32  | 52  | 84  | 60  | 59  | 51  | 74  | 51  |
| 24  | 76  | 45  | 33  | 23  | 20  | 14  | 40  | 26  | 27  | -10 | 42  | 12  | 42  | 36  | 84  | 62  | 78  | 60  | 66  | 58  | 70  | 50  | 66  | 44  |
| 25  | 75  | 46  | 24  | 16  | 23  | 9   | 42  | 24  | 24  | -8  | 40  | 28  | 46  | 32  | 62  | 43  | 70  | 46  | 70  | 55  | 74  | 46  | 50  | 36  |
| 26  | 70  | 49  | 41  | 20  | 10  | -6  | 30  | 14  | 28  | 4   | 32  | 26  | 62  | 31  | 68  | 38  | 76  | 44  | 76  | 50  | 64  | 46  | 62  | 34  |
| 27  | 64  | 47  | 47  | 24  | 11  | -8  | 24  | 14  | 12  | -6  | 26  | 18  | 62  | 36  | 62  | 43  | 70  | 45  | 82  | 51  | 70  | 45  | 63  | 45  |
| 28  | 58  | 44  | 32  | 21  | 12  | -4  | 20  | 4   | 30  | 28  | 34  | 6   | 69  | 38  | 48  | 39  | 72  | 44  | 86  | 59  | 73  | 46  | 54  | 31  |
| 29  | 45  | 30  | 45  | 33  | 19  | 0   | 22  | 2   | 28  | 14  | 39  | 18  | 64  | 32  | 50  | 36  | 76  | 46  | 82  | 51  | 79  | 48  | 49  | 30  |
| 30  | 36  | 30  | 51  | 12  | 10  | -13 | 22  | 12  | 6   | 22  | 29  | 19  | 70  | 29  | 60  | 39  | 78  | 57  | 86  | 42  | 80  | 54  | 56  | 36  |
| 31  | 44  | 30  |     |     | 12  | -15 | 32  | 6   |     |     | 22  | 2   |     |     | 64  | 38  |     | 68  | 40  | 76  | 40  | 76  | 57  |     |
| AVG | 63  | 38  | 42  | 31  | 17  | 2   | 26  | 10  | 35  | 5   | 55  | 17  | 48  | 28  | 67  | 42  | 72  | 46  | 76  | 54  | 67  | 45  | 64  | 39  |
| MAX | 80  | 58  | 54  | 46  | 37  | 2   | 42  | 30  | 55  | 28  | 52  | 34  | 72  | 46  | 86  | 62  | 86  | 60  | 86  | 62  | 80  | 57  | 92  | 54  |
| MIN | 36  | 25  | 24  | 12  | 1   | -15 | 5   | -10 | 10  | -14 | 22  | 2   | 2   | -2  | 48  | 26  | 56  | 34  | 66  | 40  | 52  | 38  | 49  | 29  |

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1964 TO SEPTEMBER 1965

| DAY | OCT |     |  | NOV |     |  | DEC |     |  | JAN |     |  | FEB |     |  | MAR |     |  | APR |     |  | MAY |     |  | JUN |     |  | JUL |     |  | AUG |     |  | SEP |  |  |
|-----|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|--|--|
|     | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  |     |  |  |
| 1   | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 2   | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 3   | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 4   | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 5   | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 6   | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 7   | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 8   | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 9   | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 10  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 11  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 12  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 13  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 14  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 15  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 16  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 17  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 18  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 19  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 20  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 21  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 22  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 23  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 24  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 25  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 26  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 27  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 28  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 29  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 30  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| 31  | 58  | 28  |  | 48  | 22  |  | 14  | 6   |  | 13  | 4   |  | 14  | -10 |  | 29  | 13  |  | 34  | 7   |  | 60  | 36  |  | 68  | 44  |  | 72  | 46  |  | 60  | 48  |  |     |  |  |
| AVG | 52  | 33  |  | 39  | 26  |  | 30  | 14  |  | 19  | 0   |  | 24  | -2  |  | 32  | 14  |  | 45  | 36  |  | 66  | 40  |  | 71  | 46  |  | 71  | 47  |  | 72  | 51  |  |     |  |  |
| MAX | 72  | 46  |  | 59  | 36  |  | 61  | 44  |  | 44  | 6   |  | 46  | -16 |  | 50  | 34  |  | 66  | 54  |  | 78  | 58  |  | 85  | 56  |  | 78  | 58  |  | 85  | 65  |  |     |  |  |
| MIN | 28  | 22  |  | 22  | 12  |  | 4   | -6  |  | -6  | -32 |  | 4   | -16 |  | 20  | 0   |  | 36  | 7   |  | 34  | 28  |  | 56  | 36  |  | 57  | 37  |  | 38  | 34  |  |     |  |  |

ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

| DAY | OCT |     |  | NOV |     |  | DEC |     |  | JAN |     |  | FEB |     |  | MAR |     |  | APR |     |  | MAY |     |  | JUN |     |  | JUL |     |  | AUG |     |  | SEP |    |  |
|-----|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|-----|--|-----|----|--|
|     | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  | MAX | MIN |  |     |    |  |
| 1   | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 2   | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 3   | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 4   | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 5   | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 6   | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 7   | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 8   | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 9   | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 10  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 11  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 12  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 13  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 14  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 15  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 16  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 17  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 18  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 19  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 20  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 21  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 22  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 23  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 24  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 25  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 26  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 27  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 28  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 29  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 30  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| 31  | 57  | 40  |  | 37  | 18  |  | 32  | 8   |  | 48  | 26  |  | 18  | 8   |  | 44  | 30  |  | 40  | 19  |  | 55  | 30  |  | 58  | 34  |  | 80  | 51  |  | 80  | 53  |  | 72  | 48 |  |
| AVG | 51  | 34  |  | 35  | 20  |  | 29  | 16  |  | 23  | 6   |  | 28  | 8   |  | 36  | 17  |  | 43  | 27  |  | 57  | 35  |  | 72  | 48  |  | 76  | 53  |  | 71  | 51  |  | 60  | 41 |  |
| MAX | 74  | 54  |  | 52  | 32  |  | 48  | 34  |  | 48  | 26  |  | 50  | 36  |  | 57  | 35  |  | 56  | 40  |  | 60  | 38  |  | 84  | 64  |  | 90  | 65  |  | 85  | 63  |  | 74  | 52 |  |
| MIN | 30  | 24  |  | 21  | 8   |  | 7   | -6  |  | -2  | -14 |  | 2   | -20 |  | 17  | 0   |  | 36  | 16  |  | 34  | 19  |  | 51  | 34  |  | 64  | 43  |  | 57  | 41  |  | 43  | 30 |  |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

| DAY | OCT<br>MAX MIN | NOV<br>MAX MIN | DEC<br>MAX MIN | JAN<br>MAX MIN | FEB<br>MAX MIN | MAR<br>MAX MIN | APR<br>MAX MIN | MAY<br>MAX MIN | JUN<br>MAX MIN | JUL<br>MAX MIN | AUG<br>MAX MIN | SEP<br>MAX MIN |
|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1   | 48 39          | 52 34          | 31 23          | 24 12          | 28 16          | 10 0           | 68 32          | 74 34          | 70 40          | 80 54          | 70 54          | 60 34          |
| 2   | 51 37          | 58 50          | 23 9           | 28 16          | 26 8           | 16 10          | 64 40          | 64 46          | 76 54          | 80 62          | 74 48          | 52 36          |
| 3   | 54 30          | 61 36          | 12 0           | 28 16          | 20 -6          | 38 18          | 52 20          | 46 39          | 80 46          | 74 58          | 70 58          | 58 44          |
| 4   | 57 40          | 34 27          | 17 -4          | 30 26          | 24 8           | 26 -6          | 34 12          | 56 32          | 82 48          | 82 50          | 72 60          | 68 44          |
| 5   | 52 36          | 34 21          | 27 1           | 30 14          | 34 6           | 22 -4          | 50 30          | 48 34          | 84 50          | 66 50          | 72 56          | 70 50          |
| 6   | 44 32          | 36 30          | 30 15          | 12 -8          | 2 -14          | 26 20          | 36 30          | 52 30          | 78 52          | 68 68          | 70 52          | 64 42          |
| 7   | 62 40          | 37 32          | 32 21          | 26 -8          | 8 -12          | 28 16          | 30 28          | 50 28          | 78 52          | 76 48          | 74 48          | 64 38          |
| 8   | 70 39          | 43 32          | 40 32          | 36 26          | 16 -16         | 24 2           | 46 26          | 42 32          | 62 50          | 76 54          | 74 50          | 76 50          |
| 9   | 72 44          | 52 42          | 51 38          | 26 8           | 24 2           | 36 0           | 52 20          | 46 34          | 80 50          | 70 62          | 68 60          | 72 54          |
| 10  | 58 35          | 57 48          | 54 40          | 24 10          | 30 10          | 48 14          | 42 20          | 38 36          | 76 58          | 76 56          | 74 54          | 56 40          |
| 11  | 55 33          | 57 37          | 55 20          | 22 10          | 30 4           | 50 26          | 26 12          | 48 34          | 78 54          | 78 54          | 60 48          | 64 38          |
| 12  | 38 32          | 44 32          | 22 14          | 18 4           | -6 -20         | 24 4           | 32 10          | 46 36          | 76 54          | 78 54          | 72 46          | 72 36          |
| 13  | 46 27          | 36 16          | 26 12          | 30 20          | 8 -24          | 32 10          | 58 16          | 52 34          | 74 56          | 74 54          | 74 54          | 74 40          |
| 14  | 55 33          | 34 16          | 33 21          | 34 18          | -10 36         | 18 58          | 30 30          | 58 32          | 62 56          | 78 54          | 72 54          | 76 44          |
| 15  | 60 42          | 28 14          | 23 8           | 34 16          | 42 22          | 34 16          | 36 32          | 42 40          | 76 54          | 72 56          | 76 52          | 76 48          |
| 16  | 51 41          | 26 12          | 25 8           | 14 -2          | 36 0           | 18 -4          | 32 30          | 44 30          | 82 64          | 68 68          | 78 54          | 78 32          |
| 17  | 41 32          | 44 26          | 34 25          | 30 -12         | 6 -10          | 8 -10          | 32 30          | 56 30          | 76 58          | 76 50          | 80 56          | 76 50          |
| 18  | 40 31          | 44 33          | 38 14          | 10 -18         | 12 -12         | 4 -10          | 30 30          | 48 32          | 72 54          | 74 54          | 78 56          | 72 52          |
| 19  | 42 34          | 33 17          | 12 1           | 8 -18          | 16 -10         | 24 -16         | 38 30          | 64 40          | 72 48          | 76 54          | 72 58          | 68 40          |
| 20  | 44 31          | 34 14          | 13 2           | 20 0           | 22 -6          | 28 6           | 42 30          | 54 38          | 66 44          | 82 56          | 72 60          | 72 38          |
| 21  | 52 29          | 38 14          | 24 12          | 38 14          | 24 10          | 32 4           | 50 22          | 48 32          | 76 54          | 80 56          | 78 54          | 64 54          |
| 22  | 59 31          | 41 16          | 16 16          | 40 26          | 26 2           | 30 20          | 42 34          | 50 30          | 68 58          | 76 68          | 72 48          | 60 40          |
| 23  | 59 36          | 45 20          | 16 2           | 44 28          | 30 16          | 36 16          | 34 34          | 58 30          | 78 60          | 74 54          | 68 44          | 40 40          |
| 24  | 57 36          | 42 28          | 20 0           | 46 26          | 16 2           | 34 20          | 38 30          | 60 32          | 78 52          | 78 62          | 72 44          | 52 34          |
| 25  | 52 30          | 46 39          | 16 11          | 34 26          | 2 -4           | 40 22          | 38 26          | 42 32          | 78 54          | 76 58          | 74 46          | 44 32          |
| 26  | 48 28          | 46 38          | 16 9           | 36 24          | 14 -4          | 52 24          | 50 30          | 42 32          | 74 52          | 72 72          | 76 50          | 64 32          |
| 27  | 56 28          | 49 33          | 15 0           | 28 22          | 30 -4          | 46 28          | 52 30          | 54 36          | 80 50          | 76 52          | 76 60          | 74 42          |
| 28  | 62 32          | 47 39          | 19 2           | 28 16          | 30 12          | 40 32          | 52 34          | 58 40          | 82 50          | 64 60          | 78 56          | 64 56          |
| 29  | 56 25          | 47 33          | 26 12          | 26 10          | 4 10           | 44 32          | 50 34          | 58 38          | 76 50          | 78 58          | 74 52          | 66 62          |
| 30  | 27 18          | 35 29          | 22 16          | 16 0           | 4 16           | 44 22          | 62 28          | 52 36          | 62 44          | 78 56          | 72 56          | 72 46          |
| 31  | 40 15          | 23 5           | 23 5           | 20 -4          | 52 28          | 52 28          | 52 28          | 56 34          | 62 44          | 76 54          | 72 40          | 40 46          |
| AVG | 52 33          | 43 29          | 26 12          | 27 11          | 21 -2          | 32 11          | 44 27          | 52 34          | 75 52          | 75 55          | 72 53          | 66 44          |
| MAX | 72 44          | 61 50          | 55 40          | 46 28          | 42 22          | 52 32          | 68 40          | 74 46          | 84 64          | 82 64          | 80 60          | 78 72          |
| MIN | 27 15          | 26 12          | 12 12          | -4 -18         | -6 -24         | 4 -16          | 26 10          | 38 28          | 62 40          | 64 40          | 40 40          | 44 32          |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

| DAY | OCT<br>MAX MIN | NOV<br>MAX MIN | DEC<br>MAX MIN | JAN<br>MAX MIN | FEB<br>MAX MIN | MAR<br>MAX MIN | APR<br>MAX MIN | MAY<br>MAX MIN | JUN<br>MAX MIN | JUL<br>MAX MIN | AUG<br>MAX MIN | SEP<br>MAX MIN |
|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1   | 52 44          | 58 32          | 16 4           | 19 -19         | 28 16          | 26 19          | 48 26          | 52 38          | 70 50          | 84 59          | 72 56          | 76 44          |
| 2   | 62 42          | 58 42          | 22 0           | 9 -21          | 40 29          | 23 7           | 48 23          | 54 34          | 59 52          | 76 54          | 72 52          | 76 53          |
| 3   | 74 42          | 52 36          | 32 2           | 16 2           | 39 16          | 6 -5           | 48 29          | 57 34          | 66 47          | 69 52          | 76 50          | 66 51          |
| 4   | 64 46          | 46 30          | 24 16          | 21 10          | 18 10          | 28 1           | 53 32          | 48 39          | 69 50          | 68 47          | 76 53          | 68 48          |
| 5   | 62 48          | 36 24          | 30 16          | 11 -12         | 13 7           | 20 1           | 56 20          | 49 33          | 76 47          | 70 53          | 80 53          | 68 50          |
| 6   | 48 32          | 34 22          | 32 28          | 14 -10         | 18 6           | 26 -3          | 37 19          | 48 30          | 78 54          | 68 47          | 63 58          | 56 52          |
| 7   | 48 28          | 38 18          | 28 20          | 13 -14         | 23 4           | 18 -4          | 50 19          | 46 25          | 74 53          | 71 46          | 74 55          | 69 46          |
| 8   | 48 28          | 38 18          | 32 26          | -15 -23        | 20 2           | 35 -1          | 54 26          | 65 27          | 69 46          | 80 54          | 74 50          | 72 43          |
| 9   | 58 44          | 38 12          | 30 14          | -5 -26         | 22 2           | 49 23          | 50 32          | 66 43          | 63 54          | 81 54          | 70 59          | 72 45          |
| 10  | 58 48          | 32 13          | 24 8           | 0 -20          | 13 0           | 38 23          | 46 28          | 59 37          | 55 48          | 69 50          | 69 48          | 67 54          |
| 11  | 50 42          | 36 16          | 30 14          | 0 -22          | 1 -14          | 35 9           | 48 26          | 64 32          | 54 48          | 77 47          | 59 43          | 60 56          |
| 12  | 48 44          | 36 14          | 38 30          | 12 -30         | 13 -15         | 27 2           | 48 27          | 52 42          | 72 50          | 74 54          | 72 41          | 61 44          |
| 13  | 44 38          | 38 18          | 40 30          | 28 -5          | 10 -14         | 24 13          | 74 56          | 68 40          | 68 50          | 78 54          | 74 47          | 50 44          |
| 14  | 44 28          | 32 12          | 30 22          | 25 1           | 15 1           | 20 0           | 40 74          | 70 36          | 74 50          | 84 57          | 76 53          | 61 41          |
| 15  | 58 42          | 22 12          | 20 10          | 32 -7          | 14 -3          | 36 2           | 53 39          | 74 41          | 76 50          | 85 61          | 62 43          | 70 38          |
| 16  | 58 46          | 18 4           | 16 8           | -8 -22         | 15 -5          | 48 28          | 52 35          | 74 42          | 60 49          | 85 35          | 63 68          | 41 76          |
| 17  | 62 46          | 24 26          | 12 10          | -19 -26        | 21 -4          | 40 35          | 64 38          | 55 40          | 54 48          | 86 35          | 75 45          | 78 46          |
| 18  | 60 46          | 30 20          | 30 16          | 27 -18         | 11 -3          | 45 35          | 64 38          | 60 40          | 68 46          | 87 37          | 65 42          | 77 49          |
| 19  | 58 44          | 30 20          | 38 28          | 37 18          | 8 -7           | 60 36          | 64 38          | 65 39          | 65 46          | 84 37          | 68 39          | 82 52          |
| 20  | 42 30          | 14 20          | 34 28          | 29 15          | 6 -13          | 50 37          | 49 36          | 41 36          | 54 38          | 70 49          | 56 81          | 52 52          |
| 21  | 50 30          | 26 10          | 16 29          | 9 -5           | -16 4          | 36 36          | 66 36          | 56 38          | 61 39          | 75 48          | 66 54          | 81 51          |
| 22  | 40 36          | 12 40          | 22 25          | 1 -16          | -10 3          | 32 32          | 62 44          | 58 41          | 62 43          | 82 58          | 60 44          | 71 55          |
| 23  | 56 36          | 34 28          | 28 10          | 13 -6          | 11 -4          | 39 28          | 58 48          | 59 39          | 59 52          | 72 50          | 72 40          | 72 50          |
| 24  | 52 32          | 30 16          | 22 10          | 13 -6          | 21 -6          | 27 19          | 48 31          | 63 35          | 50 50          | 62 50          | 72 55          | 68 47          |
| 25  | 52 44          | 30 16          | 24 0           | 18 -6          | 23 0           | 29 8           | 48 35          | 54 39          | 69 54          | 71 54          | 61 60          | 64 56          |
| 26  | 52 38          | 36 24          | 30 -8          | 18 -1          | 28 3           | 47 12          | 40 31          | 54 40          | 61 51          | 74 49          | 62 45          | 65 50          |
| 27  | 48 38          | 22 14          | 12 10          | -7 -30         | 28 -2          | 49 26          | 40 30          | 66 30          | 56 48          | 75 49          | 52 45          | 62 42          |
| 28  | 46 32          | 22 10          | -12 24         | 18 18          | 3 -9           | 52 24          | 48 30          | 72 36          | 52 44          | 71 53          | 56 46          | 56 41          |
| 29  | 36 26          | 18 10          | 20 10          | 25 20          | 31 23          | 59 34          | 54 32          | 57 38          | 70 47          | 61 45          | 63 42          | 48 39          |
| 30  | 46 26          | 20 0           | 22 -4          | 25 11          | 31 31          | 43 35          | 62 31          | 71 46          | 77 59          | 66 44          | 64 43          | 53 34          |
| 31  | 46 28          | 18 18          | 2 2            | 33 11          | 62 27          | 43 27          | 62 31          | 66 46          | 77 59          | 72 44          | 67 43          | 43 34          |
| AVG | 53 37          | 32 19          | 27 12          | 17 -3          | 18 0           | 37 17          | 54 30          | 58 34          | 65 49          | 75 53          | 69 49          | 68 48          |
| MAX | 78 56          | 58 42          | 40 30          | 33 25          | 40 29          | 62 37          | 74 55          | 74 47          | 78 59          | 87 81          | 81 60          | 82 68          |
| MIN | 36 26          | 18 0           | 10 -10         | -15 -26        | -5 -16         | 6 -5           | 37 37          | 41 25          | 52 38          | 61 41          | 52 39          | 48 34          |



## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

| DAY | OCT<br>MAX | OCT<br>MIN | NOV<br>MAX | NOV<br>MIN | DEC<br>MAX | DEC<br>MIN | JAN<br>MAX | JAN<br>MIN | FEB<br>MAX | FEB<br>MIN | MAR<br>MAX | MAR<br>MIN | APR<br>MAX | APR<br>MIN | MAY<br>MAX | MAY<br>MIN | JUN<br>MAX | JUN<br>MIN | JUL<br>MAX | JUL<br>MIN | AUG<br>MAX | AUG<br>MIN | SEP<br>MAX | SEP<br>MIN |
|-----|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1   | 72         | 48         | 42         | 19         | 27         | 10         | 22         | 2          | 27         | 14         | 36         | 6          | 29         | 0          | 53         | 32         | 74         | 36         | 73         | 49         | 78         | 56         | 82         | 59         |
| 2   | 74         | 51         | 47         | 32         | 35         | 25         | 9          | 1          | 29         | 23         | 33         | 10         | 34         | 14         | 58         | 29         | 81         | 51         | 67         | 41         | 77         | 61         | 71         | 55         |
| 3   | 67         | 50         | 44         | 31         | 33         | 26         | 16         | 2          | 25         | 21         | 29         | 26         | 30         | 2          | 55         | 39         | 69         | 48         | 67         | 44         | 78         | 56         | 65         | 50         |
| 4   | 51         | 37         | 46         | 26         | 33         | 27         | 17         | -1         | 20         | 3          | 26         | 8          | 45         | 17         | 52         | 28         | 55         | 38         | 74         | 46         | 73         | 59         | 76         | 54         |
| 5   | 44         | 32         | 46         | 26         | 33         | 26         | 18         | -2         | 2          | -4         | 11         | 0          | 42         | 35         | 45         | 27         | 68         | 36         | 74         | 56         | 72         | 58         | 74         | 52         |
| 6   | 48         | 28         | 44         | 26         | 26         | 18         | 22         | 2          | 16         | -1         | 18         | -6         | 38         | 23         | 53         | 28         | 61         | 50         | 61         | 42         | 78         | 55         | 75         | 62         |
| 7   | 42         | 39         | 37         | 31         | 24         | 17         | 29         | 20         | 18         | -3         | 19         | -2         | 49         | 21         | 48         | 27         | 67         | 46         | 64         | 40         | 78         | 55         | 72         | 58         |
| 8   | 43         | 35         | 33         | 27         | 19         | 9          | 20         | 5          | 27         | 0          | 21         | 11         | 39         | 22         | 52         | 33         | 65         | 45         | 68         | 40         | 77         | 61         | 58         | 54         |
| 9   | 54         | 31         | 33         | 27         | 8          | -4         | 14         | -3         | 24         | 14         | 24         | 10         | 47         | 22         | 60         | 50         | 67         | 34         | 70         | 44         | 74         | 56         | 58         | 52         |
| 10  | 47         | 32         | 31         | 28         | 4          | -10        | 17         | -1         | 21         | 12         | 23         | 16         | 46         | 36         | 45         | 30         | 77         | 32         | 63         | 48         | 68         | 54         | 52         | 38         |
| 11  | 52         | 40         | 35         | 21         | 12         | -10        | 11         | -10        | 25         | 8          | 18         | 9          | 36         | 28         | 50         | 30         | 77         | 47         | 72         | 53         | 69         | 50         | 61         | 36         |
| 12  | 58         | 34         | 28         | 21         | 32         | 7          | 16         | 10         | 32         | 13         | 21         | 10         | 39         | 23         | 50         | 33         | 82         | 53         | 70         | 58         | 71         | 48         | 64         | 44         |
| 13  | 59         | 36         | 32         | 26         | 40         | 28         | 20         | 13         | 24         | 8          | 30         | 20         | 50         | 23         | 47         | 32         | 83         | 60         | 68         | 55         | 75         | 50         | 64         | 47         |
| 14  | 63         | 33         | 25         | 22         | 34         | 27         | 20         | 15         | 7          | 1          | 30         | 25         | 57         | 33         | 44         | 31         | 80         | 61         | 72         | 57         | 79         | 60         | 69         | 44         |
| 15  | 69         | 42         | 30         | 23         | 26         | 3          | 21         | 10         | 11         | 2          | 31         | 19         | 63         | 34         | 56         | 32         | 62         | 58         | 84         | 53         | 79         | 61         | 72         | 53         |
| 16  | 74         | 47         | 31         | 20         | 4          | 1          | 25         | 2          | 16         | 2          | 30         | 16         | 51         | 37         | 73         | 36         | 59         | 46         | 86         | 60         | 82         | 62         | 72         | 53         |
| 17  | 74         | 46         | 24         | 17         | 10         | 2          | 27         | 16         | 27         | -1         | 29         | 9          | 48         | 37         | 79         | 50         | 68         | 42         | 83         | 62         | 76         | 63         | 63         | 42         |
| 18  | 74         | 50         | 34         | 24         | 22         | 9          | 37         | 23         | 33         | 5          | 38         | 27         | 44         | 35         | 57         | 44         | 68         | 44         | 80         | 53         | 79         | 62         | 54         | 33         |
| 19  | 61         | 47         | 37         | 25         | 22         | 11         | 36         | 22         | 36         | 26         | 38         | 29         | 35         | 28         | 60         | 45         | 80         | 56         | 73         | 51         | 70         | 48         | 58         | 30         |
| 20  | 59         | 40         | 26         | 19         | 26         | 19         | 29         | 8          | 40         | 27         | 36         | 31         | 37         | 23         | 63         | 52         | 62         | 44         | 70         | 50         | 60         | 37         | 60         | 30         |
| 21  | 46         | 41         | 25         | 18         | 26         | 22         | 33         | 9          | 42         | 23         | 35         | 31         | 47         | 22         | 52         | 33         | 56         | 42         | 72         | 57         | 58         | 38         | 64         | 33         |
| 22  | 54         | 30         | 33         | 25         | 25         | 23         | 41         | 15         | 42         | 20         | 32         | 24         | 43         | 35         | 60         | 32         | 70         | 42         | 74         | 51         | 65         | 40         | 66         | 38         |
| 23  | 57         | 38         | 32         | 18         | 31         | 23         | 44         | 20         | 36         | 22         | 41         | 17         | 44         | 33         | 56         | 42         | 57         | 48         | 76         | 47         | 76         | 46         | 67         | 38         |
| 24  | 54         | 31         | 40         | 32         | 24         | -4         | 38         | 31         | 28         | 26         | 48         | 22         | 37         | 33         | 50         | 47         | 52         | 48         | 74         | 50         | 80         | 57         | 65         | 42         |
| 25  | 46         | 40         | 36         | 23         | -5         | -14        | 36         | 16         | 26         | 23         | 35         | 31         | 47         | 29         | 63         | 39         | 59         | 45         | 69         | 47         | 75         | 51         | 53         | 44         |
| 26  | 40         | 30         | 25         | 10         | -8         | -21        | 16         | 0          | 29         | 22         | 37         | 28         | 45         | 28         | 47         | 27         | 77         | 43         | 57         | 54         | 59         | 43         | 49         | 45         |
| 27  | 44         | 28         | 28         | 14         | 5          | -21        | 15         | -7         | 25         | 18         | 27         | 19         | 62         | 35         | 59         | 26         | 86         | 61         | 64         | 56         | 63         | 42         | 59         | 38         |
| 28  | 44         | 33         | 38         | 13         | 30         | 4          | 15         | -11        | 35         | 13         | 35         | 7          | 68         | 38         | 71         | 39         | 83         | 58         | 70         | 60         | 73         | 46         | 52         | 37         |
| 29  | 41         | 32         | 43         | 20         | 32         | 4          | 18         | 4          | 35         | 13         | 36         | 23         | 42         | 34         | 72         | 50         | 72         | 50         | 75         | 66         | 74         | 56         | 43         | 31         |
| 30  | 32         | 29         | 22         | 20         | 13         | -2         | 28         | 17         | 22         | 10         | 22         | 14         | 50         | 34         | 69         | 51         | 76         | 48         | 76         | 63         | 76         | 50         | 53         | 27         |
| 31  | 30         | 27         |            |            | 20         | -3         | 30         | 22         |            |            | 20         | 8          | 50         |            | 62         | 40         |            |            | 79         | 58         | 82         | 58         |            |            |
| AVG | 54         | 37         | 34         | 22         | 21         | 8          | 24         | 8          | 26         | 12         | 29         | 16         | 45         | 27         | 57         | 37         | 70         | 47         | 72         | 52         | 73         | 53         | 63         | 44         |
| MAX | 74         | 51         | 47         | 32         | 40         | 28         | 44         | 31         | 42         | 27         | 48         | 31         | 58         | 43         | 79         | 52         | 86         | 61         | 86         | 66         | 82         | 63         | 82         | 62         |
| MIN | 30         | 27         | 22         | 10         | -8         | -21        | 6          | -11        | 2          | -4         | 11         | -6         | 29         | 0          | 45         | 26         | 52         | 32         | 57         | 40         | 58         | 37         | 43         | 27         |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

| DAY | OCT |     | NOV |     | DEC |     | JAN |     | FEB |     | MAR |     | APR |     | MAY |     | JUN |     | JUL |     | AUG |     | SEP |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| 1   | 58  | 38  | 43  | 36  | 28  | 12  | 9   | -1  | 38  | 10  | 23  | 14  | 37  | 16  | 83  | 48  | 78  | 60  | 71  | 55  | 78  | 61  | 54  | 45  |
| 2   | 62  | 40  | 46  | 37  | 14  | 4   | 9   | -1  | 43  | 23  | 33  | 14  | 35  | 27  | 70  | 45  | 82  | 62  | 60  | 56  | 78  | 60  | 60  | 40  |
| 3   | 61  | 50  | 56  | 44  | 24  | 4   | 11  | -4  | 42  | 10  | 30  | 6   | 34  | 24  | 48  | 34  | 71  | 50  | 71  | 56  | 71  | 54  | 59  | 39  |
| 4   | 47  | 38  | 53  | 41  | 16  | 11  | 11  | -10 | 16  | -20 | 33  | 3   | 33  | 13  | 65  | 34  | 64  | 46  | 70  | 54  | 65  | 47  | 70  | 55  |
| 5   | 60  | 32  | 47  | 40  | 19  | 12  | 16  | -6  | 13  | -20 | 32  | 25  | 33  | 9   | 53  | 43  | 66  | 51  | 66  | 56  | 68  | 46  | 67  | 52  |
| 6   | 73  | 38  | 44  | 37  | 17  | 9   | 16  | -3  | 28  | 11  | 25  | 20  | 38  | 6   | 42  | 30  | 58  | 50  | 73  | 53  | 72  | 52  | 52  | 50  |
| 7   | 62  | 49  | 52  | 42  | 25  | 4   | 13  | -4  | 33  | 10  | 30  | 17  | 40  | 23  | 41  | 29  | 63  | 48  | 75  | 53  | 75  | 51  | 56  | 50  |
| 8   | 68  | 49  | 56  | 44  | 34  | 23  | 11  | -10 | 38  | 13  | 27  | 8   | 50  | 23  | 56  | 36  | 75  | 48  | 78  | 52  | 78  | 53  | 59  | 48  |
| 9   | 65  | 36  | 55  | 43  | 37  | 31  | 8   | -2  | 35  | 14  | 20  | 5   | 57  | 32  | 60  | 43  | 79  | 55  | 80  | 56  | 80  | 53  | 56  | 52  |
| 10  | 65  | 31  | 46  | 38  | 35  | 30  | 5   | 1   | 38  | 31  | 18  | 7   | 37  | 27  | 78  | 45  | 79  | 54  | 77  | 57  | 82  | 56  | 65  | 55  |
| 11  | 62  | 38  | 46  | 40  | 50  | 36  | 5   | -13 | 42  | 20  | 23  | 16  | 29  | 20  | 69  | 53  | 79  | 56  | 75  | 59  | 75  | 55  | 62  | 42  |
| 12  | 66  | 43  | 44  | 39  | 36  | 30  | 7   | -14 | 17  | 3   | 32  | 18  | 41  | 28  | 60  | 45  | 70  | 46  | 70  | 51  | 74  | 60  | 66  | 40  |
| 13  | 55  | 41  | 42  | 26  | 30  | 13  | 8   | 1   | 4   | -9  | 28  | 19  | 46  | 30  | 53  | 46  | 59  | 39  | 69  | 49  | 80  | 59  | 69  | 43  |
| 14  | 61  | 35  | 36  | 27  | 27  | 12  | 0   | -7  | 8   | -14 | 29  | 21  | 51  | 27  | 62  | 44  | 69  | 37  | 73  | 47  | 82  | 58  | 58  | 41  |
| 15  | 49  | 24  | 40  | 23  | 24  | 18  | 1   | -12 | 22  | -14 | 26  | 4   | 49  | 30  | 61  | 37  | 73  | 43  | 68  | 58  | 83  | 62  | 46  | 44  |
| 16  | 53  | 27  | 31  | 15  | 18  | 14  | 22  | -11 | 21  | 2   | 25  | 1   | 51  | 26  | 56  | 47  | 70  | 47  | 72  | 61  | 83  | 60  | 64  | 45  |
| 17  | 51  | 33  | 35  | 18  | 16  | 7   | 28  | -14 | 28  | 1   | 30  | 13  | 54  | 38  | 52  | 46  | 74  | 52  | 75  | 55  | 76  | 57  | 55  | 39  |
| 18  | 47  | 31  | 43  | 30  | 18  | -1  | 15  | -13 | 35  | 13  | 40  | 19  | 41  | 29  | 53  | 46  | 73  | 60  | 74  | 53  | 68  | 49  | 52  | 49  |
| 19  | 53  | 31  | 45  | 40  | 23  | 17  | 5   | -17 | 31  | 1   | 44  | 15  | 38  | 24  | 67  | 50  | 74  | 52  | 69  | 60  | 75  | 46  | 62  | 46  |
| 20  | 55  | 41  | 45  | 23  | 19  | 9   | 0   | -19 | 16  | -7  | 45  | 20  | 45  | 23  | 64  | 47  | 51  | 46  | 75  | 64  | 70  | 40  | 68  | 47  |
| 21  | 46  | 30  | 22  | 9   | 22  | 6   | 3   | -11 | 18  | 2   | 34  | 30  | 38  | 33  | 69  | 40  | 65  | 45  | 67  | 51  | 66  | 50  | 67  | 45  |
| 22  | 30  | 22  | 20  | 0   | 25  | 15  | -1  | -16 | 33  | 14  | 46  | 26  | 44  | 34  | 71  | 47  | 67  | 50  | 70  | 44  | 66  | 50  | 80  | 65  |
| 23  | 21  | 16  | 34  | 20  | 11  | -9  | 8   | -14 | 23  | -1  | 34  | 28  | 41  | 33  | 60  | 41  | 71  | 52  | 80  | 55  | 59  | 53  | 68  | 50  |
| 24  | 33  | 12  | 33  | 13  | 8   | -6  | 8   | -8  | 18  | 0   | 35  | 29  | 41  | 36  | 55  | 38  | 76  | 51  | 81  | 54  | 65  | 47  | 70  | 47  |
| 25  | 40  | 32  | 27  | 5   | 10  | -12 | 14  | 4   | 22  | -4  | 33  | 18  | 49  | 35  | 46  | 39  | 62  | 40  | 82  | 58  | 69  | 53  | 77  | 54  |
| 26  | 45  | 34  | 36  | 20  | 26  | 8   | 24  | 14  | 3   | -17 | 37  | 12  | 64  | 31  | 60  | 45  | 65  | 39  | 81  | 62  | 77  | 54  | 73  | 53  |
| 27  | 44  | 28  | 26  | 3   | 31  | 17  | 20  | 6   | 18  | -5  | 36  | 27  | 72  | 38  | 55  | 44  | 52  | 44  | 83  | 60  | 66  | 48  | 65  | 36  |
| 28  | 33  | 22  | 29  | 2   | 18  | 14  | 27  | 8   | 27  | 14  | 34  | 15  | 70  | 39  | 54  | 37  | 63  | 42  | 82  | 61  | 68  | 50  | 53  | 35  |
| 29  | 42  | 27  | 32  | 18  | 19  | 2   | 23  | 28  |     |     | 22  | 9   | 68  | 42  | 65  | 34  | 69  | 41  | 82  | 62  | 66  | 44  | 47  | 32  |
| 30  | 51  | 21  | 27  | 12  | 21  | 6   | 29  | -2  |     |     | 30  | 7   | 71  | 43  | 71  | 37  | 61  | 56  | 84  | 62  | 64  | 44  | 48  | 48  |
| 31  | 48  | 22  |     |     | 20  | 0   | 20  | -7  |     |     | 33  | 14  |     |     | 80  | 46  |     |     | 76  | 68  | 64  | 46  |     |     |
| AVG | 52  | 32  | 40  | 26  | 23  | 11  | 13  | -4  | 25  | 3   | 31  | 15  | 46  | 28  | 61  | 42  | 69  | 49  | 74  | 56  |     |     |     |     |
| MAX | 73  | 50  | 56  | 44  | 50  | 36  | 43  | -8  | 43  | 31  | 46  | 30  | 72  | 43  | 83  | 53  | 82  | 62  | 84  | 68  | 83  | 62  | 80  | 65  |
| MIN | 21  | 12  | 20  | 0   | 8   | -12 | -1  | -19 | 3   | -20 | 18  | 1   | 29  | 6   | 41  | 29  | 51  | 37  | 60  | 44  | 59  | 44  | 46  | 33  |



## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

| DAY | OCT     | NOV     | DEC     | JAN     | FEB     | MAR     | APR     | MAY     | JUN     | JUL     | AUG     | SEP     |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|     | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN |
| 1   | 51 36   | 58 36   | 35 19   | 22 4    | 1 -13   | 31 22   | 40 18   | 45 34   | 62 40   | 76 60   | 75 59   | 65 42   |
| 2   | 51 36   | 58 36   | 35 19   | 22 4    | 1 -13   | 31 22   | 40 18   | 45 34   | 62 40   | 76 60   | 75 59   | 65 42   |
| 3   | 51 36   | 58 36   | 35 19   | 22 4    | 1 -13   | 31 22   | 40 18   | 45 34   | 62 40   | 76 60   | 75 59   | 65 42   |
| 4   | 51 36   | 58 36   | 35 19   | 22 4    | 1 -13   | 31 22   | 40 18   | 45 34   | 62 40   | 76 60   | 75 59   | 65 42   |
| 5   | 46 31   | 50 31   | 32 18   | 28 8    | 10 24   | 23 21   | 16 14   | 32 34   | 32 16   | 49 33   | 58 33   | 64 33   |
| 6   | 59 30   | 39 29   | 19 10   | 23 18   | 30 11   | 27 12   | 40 15   | 57 33   | 65 38   | 72 56   | 75 60   | 66 57   |
| 7   | 59 30   | 39 29   | 19 10   | 23 18   | 30 11   | 27 12   | 40 15   | 57 33   | 65 38   | 72 56   | 75 60   | 66 57   |
| 8   | 72 50   | 42 47   | 21 4    | 5 2     | 33 23   | 25 14   | 27 14   | 60 34   | 75 52   | 76 53   | 77 54   | 76 61   |
| 9   | 75 50   | 47 34   | 24 30   | 12 19   | 11 10   | 17 24   | 18 10   | 57 39   | 64 59   | 44 39   | 50 39   | 46 44   |
| 10  | 70 54   | 47 34   | 30 12   | 19 1    | 10 10   | 24 10   | 49 32   | 68 39   | 59 39   | 75 51   | 80 59   | 68 44   |
| 11  | 57 53   | 51 47   | 14 1    | 25 20   | 21 35   | 30 18   | 48 32   | 73 40   | 67 38   | 66 49   | 74 59   | 72 51   |
| 12  | 57 53   | 51 47   | 14 1    | 25 20   | 21 35   | 30 18   | 48 32   | 73 40   | 67 38   | 66 49   | 74 59   | 72 51   |
| 13  | 60 57   | 51 47   | 14 1    | 25 20   | 21 35   | 30 18   | 48 32   | 73 40   | 67 38   | 66 49   | 74 59   | 72 51   |
| 14  | 60 57   | 51 47   | 14 1    | 25 20   | 21 35   | 30 18   | 48 32   | 73 40   | 67 38   | 66 49   | 74 59   | 72 51   |
| 15  | 51 43   | 37 32   | 14 -3   | 19 -2   | 20 6    | 46 27   | 30 19   | 68 29   | 63 44   | 69 53   | 61 54   | 73 60   |
| 16  | 42 30   | 34 20   | 13 -4   | -3 -11  | 18 1    | 43 27   | 29 22   | 60 42   | 71 44   | 73 51   | 69 46   | 71 52   |
| 17  | 42 30   | 34 20   | 13 -4   | -3 -11  | 18 1    | 43 27   | 29 22   | 60 42   | 71 44   | 73 51   | 69 46   | 71 52   |
| 18  | 42 30   | 34 20   | 13 -4   | -3 -11  | 18 1    | 43 27   | 29 22   | 60 42   | 71 44   | 73 51   | 69 46   | 71 52   |
| 19  | 42 30   | 34 20   | 13 -4   | -3 -11  | 18 1    | 43 27   | 29 22   | 60 42   | 71 44   | 73 51   | 69 46   | 71 52   |
| 20  | 51 33   | 43 33   | 25 17   | 1 1     | 24 19   | 31 24   | 51 35   | 77 56   | 81 57   | 65 48   | 74 57   | 62 49   |
| 21  | 51 32   | 44 39   | 13 3    | 15 -8   | 24 15   | 27 23   | 41 33   | 58 46   | 69 59   | 72 76   | 69 56   | 63 45   |
| 22  | 51 32   | 44 39   | 13 3    | 15 -8   | 24 15   | 27 23   | 41 33   | 58 46   | 69 59   | 72 76   | 69 56   | 63 45   |
| 23  | 56 51   | 40 16   | 12 1    | 27 15   | 25 11   | 25 4    | 34 28   | 49 34   | 75 53   | 80 58   | 60 44   | 62 41   |
| 24  | 54 47   | 23 21   | 10 20   | 0 37    | 27 10   | 21 7    | 49 41   | 60 59   | 72 49   | 77 74   | 58 59   | 52 32   |
| 25  | 47 43   | 21 10   | 20 0    | 37 23   | 29 10   | 21 7    | 41 32   | 59 47   | 67 49   | 74 59   | 61 38   | 56 32   |
| 26  | 49 39   | 26 15   | 9 3     | 33 16   | 36 16   | 27 2    | 41 43   | 56 46   | 67 46   | 78 59   | 68 48   | 60 40   |
| 27  | 46 37   | 23 13   | 8 3     | 33 13   | 36 16   | 27 2    | 41 43   | 56 46   | 67 46   | 78 59   | 68 48   | 60 40   |
| 28  | 52 34   | 30 8    | 3 1     | 33 13   | 36 16   | 27 2    | 41 43   | 56 46   | 67 46   | 78 59   | 68 48   | 60 40   |
| 29  | 50 37   | 32 10   | 1 1     | 33 13   | 36 16   | 27 2    | 41 43   | 56 46   | 67 46   | 78 59   | 68 48   | 60 40   |
| 30  | 51 26   | 36 30   | 6 0     | 21 0    | 32 24   | 18 30   | 47 34   | 71 44   | 84 64   | 73 60   | 70 48   | 64 46   |
| 31  | 52 27   | 36 17   | 5 5     | 6 -13   | 30 18   | 18 30   | 47 34   | 71 44   | 84 64   | 73 60   | 70 48   | 64 46   |
| AVG | 54 39   | 40 28   | 19 6    | 16 -2   | 25 9    | 29 15   | 42 27   | 59 40   | 70 48   | 73 53   | 70 52   | 66 49   |
| MAX | 75 59   | 61 47   | 52 34   | 37 23   | 41 32   | 46 27   | 57 39   | 83 56   | 84 64   | 80 60   | 82 64   | 76 64   |
| MIN | 34 23   | 21 9    | 4 -15   | -7 -23  | -5 -24  | 17 2    | 27 13   | 39 29   | 58 33   | 65 43   | 57 38   | 52 32   |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY | OCT     | NOV     | DEC     | JAN     | FEB     | MAR     | APR     | MAY     | JUN     | JUL     | AUG     | SEP     |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|     | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN | MAX MIN |
| 1   | 67 43   | 58 36   | 16 3    | 15 -12  | 17 -4   | 48 23   | 44 28   | 61 36   | 64 54   | 68 54   | 74 54   | 77 56   |
| 2   | 75 48   | 56 36   | 16 3    | 15 -12  | 17 -4   | 48 23   | 44 28   | 61 36   | 64 54   | 68 54   | 74 54   | 77 56   |
| 3   | 61 41   | 48 33   | 26 11   | 30 15   | 24 9    | 23 3    | 31 28   | 40 36   | 72 45   | 61 44   | 62 43   | 66 53   |
| 4   | 53 45   | 42 37   | 19 1    | 29 11   | 33 7    | 20 -4   | 36 28   | 56 35   | 64 54   | 61 44   | 62 43   | 66 53   |
| 5   | 52 47   | 35 26   | 18 -1   | 23 -14  | 7 -7    | 27 16   | 34 16   | 41 34   | 68 48   | 59 43   | 68 42   | 63 43   |
| 6   | 61 45   | 47 31   | 30 6    | 7 -14   | 12 -2   | 14 -4   | 32 19   | 57 34   | 67 51   | 67 41   | 69 46   | 65 42   |
| 7   | 49 36   | 46 24   | 34 24   | 22 3    | 5 -12   | 33 -8   | 19 16   | 50 32   | 55 45   | 67 48   | 67 56   | 69 41   |
| 8   | 47 33   | 24 14   | 30 17   | 18 -11  | 5 -13   | 36 14   | 26 9    | 55 30   | 54 45   | 70 46   | 68 55   | 61 51   |
| 9   | 49 35   | 23 9    | 33 28   | 37 2    | 16 3    | 12 -10  | 35 28   | 52 34   | 57 48   | 72 48   | 69 53   | 59 45   |
| 10  | 52 46   | 30 10   | 36 33   | 41 21   | 18 -3   | 18 -12  | 40 23   | 48 33   | 49 39   | 64 53   | 55 48   | 59 43   |
| 11  | 53 43   | 27 18   | 44 36   | 40 26   | 18 0    | 23 -7   | 40 23   | 49 34   | 52 35   | 72 54   | 66 40   | 67 43   |
| 12  | 47 32   | 30 21   | 37 22   | 33 22   | 28 0    | 34 21   | 43 25   | 46 37   | 64 42   | 83 54   | 66 52   | 66 42   |
| 13  | 54 27   | 28 13   | 36 21   | 45 30   | 36 22   | 30 11   | 35 28   | 68 35   | 70 42   | 79 62   | 68 48   | 61 41   |
| 14  | 63 48   | 31 8    | 20 12   | 29 0    | 38 30   | 27 7    | 35 28   | 65 43   | 76 52   | 75 65   | 60 47   | 65 42   |
| 15  | 68 48   | 34 15   | 35 16   | 16 -3   | 45 26   | 30 20   | 35 28   | 56 50   | 79 63   | 83 65   | 67 49   | 60 37   |
| 16  | 64 45   | 38 20   | 43 28   | -5 -25  | 31 -1   | 39 20   | 41 36   | 60 50   | 69 53   | 75 63   | 64 45   | 66 45   |
| 17  | 53 37   | 37 19   | 27 14   | 15 -24  | 25 -3   | 40 34   | 49 36   | 66 49   | 65 51   | 78 60   | 59 50   | 74 51   |
| 18  | 56 36   | 39 33   | 17 0    | 34 8    | 27 8    | 34 18   | 44 35   | 69 46   | 69 52   | 82 60   | 62 55   | 73 49   |
| 19  | 63 40   | 47 33   | -10 43  | 19 25   | 20 8    | 20 2    | 51 33   | 73 51   | 63 57   | 77 62   | 73 50   | 63 43   |
| 20  | 54 40   | 39 24   | 24 8    | 25 13   | 8 -8    | 24 2    | 40 33   | 65 51   | 71 57   | 76 60   | 76 47   | 61 34   |
| 21  | 64 41   | 32 22   | 33 24   | 27 -2   | 11 -14  | 35 17   | 37 22   | 75 52   | 71 61   | 77 62   | 73 45   | 65 41   |
| 22  | 63 38   | 22 20   | 23 2    | 26 8    | 16 -14  | 34 27   | 46 27   | 72 48   | 71 58   | 72 59   | 78 55   | 67 35   |
| 23  | 59 46   | 21 10   | 19 -10  | 41 26   | 1 -30   | 36 31   | 40 32   | 79 46   | 64 56   | 74 58   | 77 56   | 56 31   |
| 24  | 53 36   | 22 7    | 39 19   | 30 13   | 21 3    | 32 22   | 42 33   | 74 51   | 62 51   | 73 59   | 76 62   | 53 37   |
| 25  | 51 41   | 27 21   | 26 -3   | 36 4    | 21 0    | 23 18   | 33 23   | 64 39   | 59 51   | 75 54   | 80 62   | 67 53   |
| 26  | 58 49   | 24 22   | 34 8    | 2 -10   | 26 14   | 20 16   | 37 21   | 67 34   | 63 49   | 64 56   | 75 58   | 71 58   |
| 27  | 60 50   | 28 16   | 24 1    | 5 -7    | 26 1    | 22 10   | 34 25   | 74 40   | 67 47   | 66 51   | 75 58   | 66 40   |
| 28  | 71 48   | 34 27   | 36 12   | 16 4    | 33 23   | 32 18   | 45 28   | 78 52   | 70 50   | 70 51   | 71 62   | 56 30   |
| 29  | 64 40   | 30 27   | 28 8    | 18 -4   | 30 19   | 44 31   | 47 32   | 79 51   | 74 55   | 70 51   | 71 51   | 63 38   |
| 30  | 65 36   | 30 17   | 15 3    | 26 -5   | 30 14   | 29 29   | 60 41   | 74 48   | 65 55   | 71 49   | 70 50   | 63 35   |
| 31  | 46 35   | 21 14   | -12 13  | -3 13   | 41 29   | 29 29   | 60 41   | 74 48   | 65 55   | 71 49   | 70 50   | 63 35   |
| AVG | 58 41   | 35 21   | 27 10   | 25 3    | 21 2    | 30 14   | 39 25   | 62 42   | 65 50   | 72 54   | 69 51   | 64 44   |
| MAX | 75 50   | 58 36   | 44 36   | 45 30   | 45 30   | 48 34   | 60 49   | 79 59   | 79 63   | 83 65   | 80 62   | 77 64   |
| MIN | 46 27   | 21 7    | -12 13  | -25 13  | -30 1   | -12 18  | 19 8    | 39 30   | 49 35   | 59 41   | 55 40   | 53 30   |

## ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

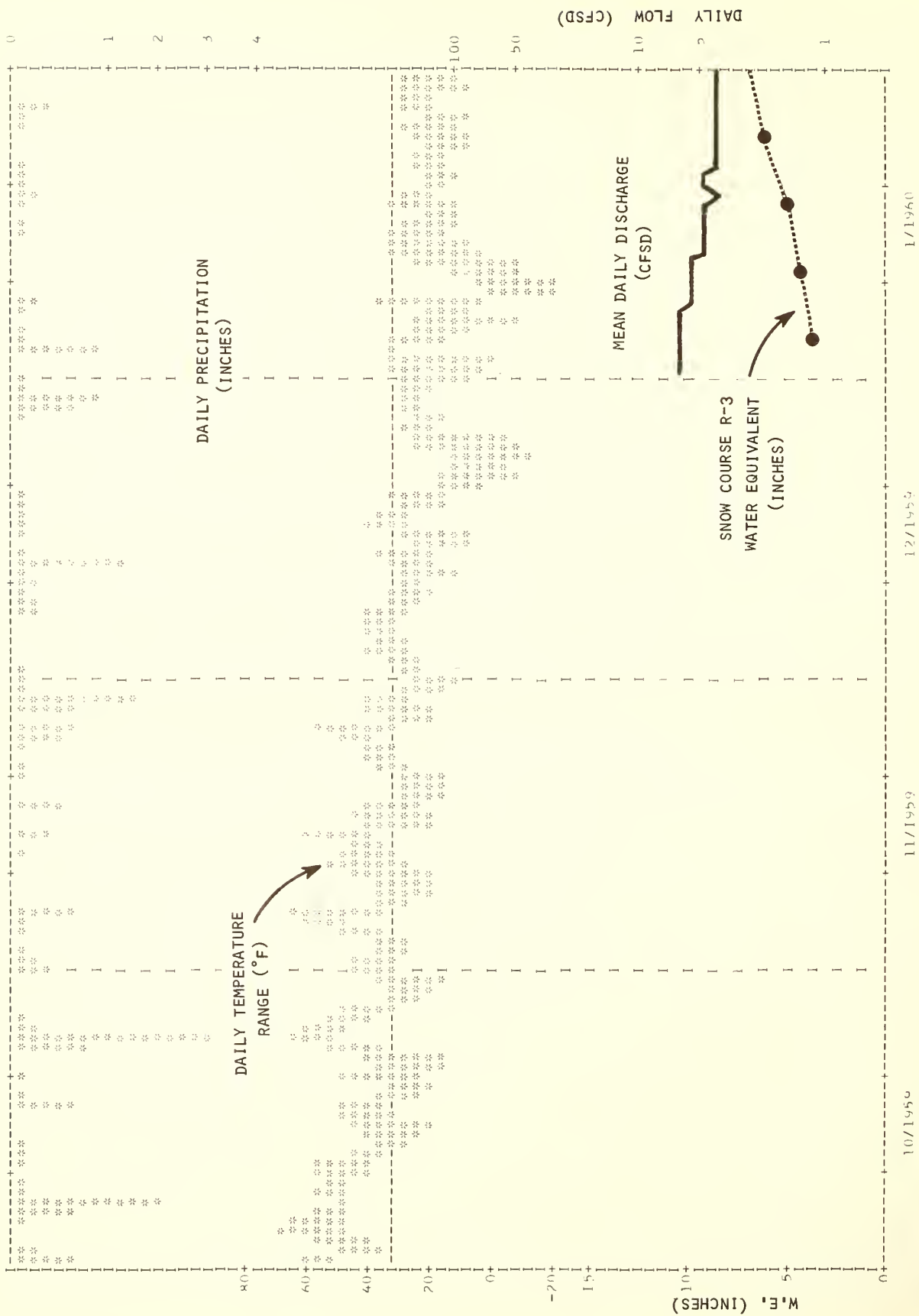
STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

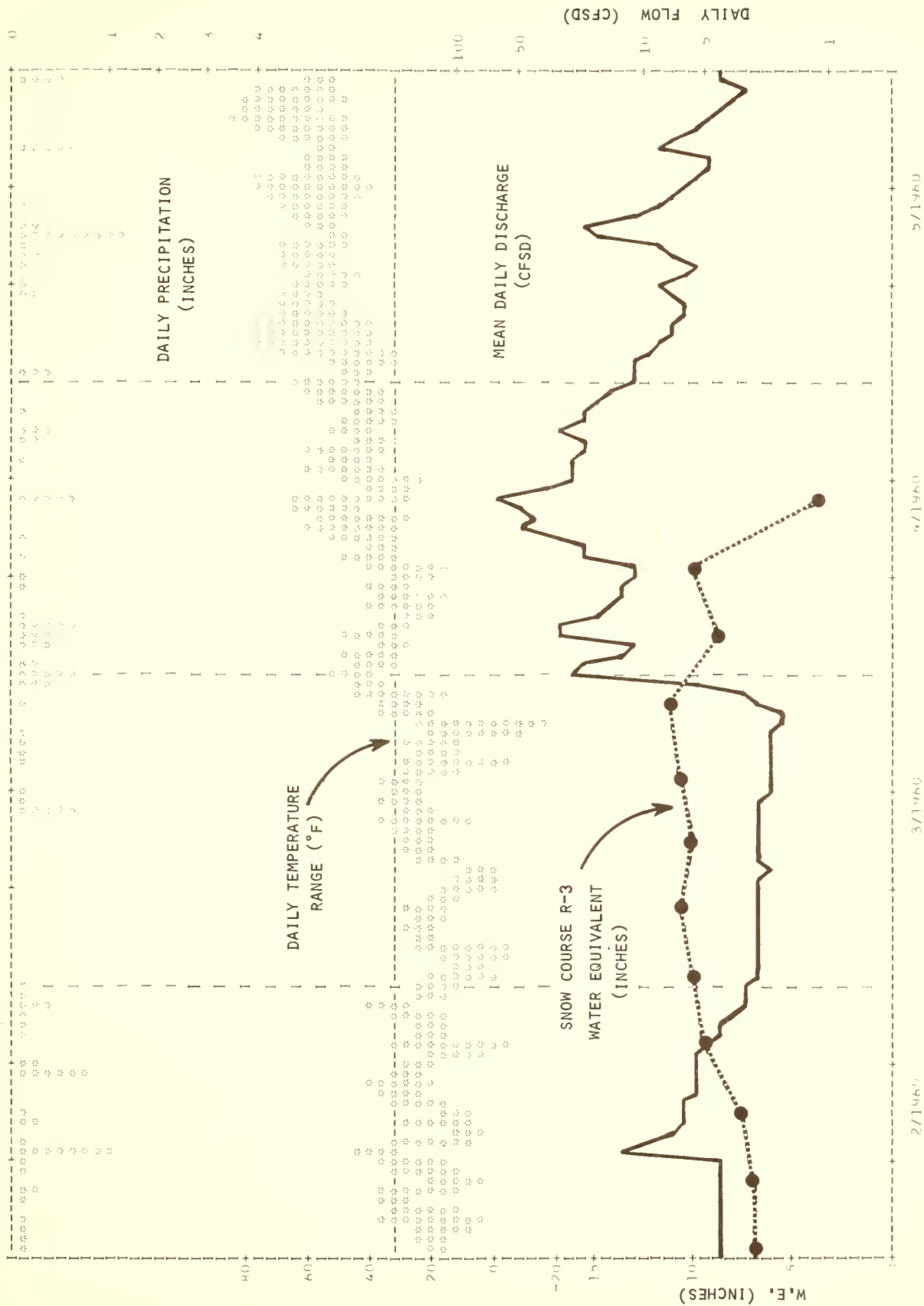
| DAY | OCT |     |      | NOV |     |      | DEC |     |      | JAN |     |      | FEB |     |      | MAR |     |      | APR |     |      | MAY |     |      | JUN |     |      | JUL |     |      | AUG |  |  | SEP |  |  |
|-----|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|--|--|-----|--|--|
|     | MAX | MIN | PREC | MAX | MIN | PREC | MAX | MIN | PREC | MAX | MIN | PREC | MAX | MIN | PREC | MAX | MIN | PREC | MAX | MIN | PREC | MAX | MIN | PREC | MAX | MIN | PREC | MAX | MIN | PREC |     |  |  |     |  |  |
| 1   | 49  | 31  | 38   | 48  | 28  | 28   | 17  | 37  | 29   | 14  | -21 | 31   | 11  | 49  | 38   | 57  | 30  | 61   | 45  | 76  | 59   | 77  | 59  | 79   | 60  | 62  | 60   | 62  | 60  | 62   |     |  |  |     |  |  |
| 2   | 51  | 30  | 44   | 35  | 28  | 21   | 0   | 28  | 15   | 44  | -15 | 33   | 24  | 37  | 31   | 66  | 46  | 51   | 45  | 78  | 60   | 70  | 66  | 80   | 62  | 60  | 62   | 60  | 62  |      |     |  |  |     |  |  |
| 3   | 63  | 38  | 51   | 29  | 32  | 5    | 5   | 20  | 45   | 18  | 32  | 28   | 28  | 36  | 30   | 63  | 44  | 64   | 35  | 78  | 65   | 77  | 61  | 80   | 66  | 60  | 62   | 60  | 62  |      |     |  |  |     |  |  |
| 4   | 65  | 46  | 30   | 26  | 14  | 14   | 0   | 32  | 13   | 31  | 18  | 41   | 29  | 41  | 30   | 47  | 38  | 58   | 43  | 75  | 65   | 76  | 59  | 75   | 60  | 60  | 62   | 60  | 62  |      |     |  |  |     |  |  |
| 5   | 65  | 45  | 32   | 26  | 28  | 15   | 1   | 31  | 31   | 31  | 0   | 42   | 27  | 32  | 28   | 41  | 36  | 69   | 55  | 74  | 60   | 76  | 56  | 77   | 60  | 60  | 62   | 60  | 62  |      |     |  |  |     |  |  |
| 6   | 64  | 43  | 34   | 30  | 42  | 27   | 11  | -10 | 24   | -2  | 33  | 25   | 35  | 27  | 46   | 46  | 35  | 69   | 56  | 72  | 57   | 71  | 63  | 68   | 56  | 49  | 49   | 49  | 49  |      |     |  |  |     |  |  |
| 7   | 56  | 48  | 35   | 26  | 26  | -5   | -6  | -16 | 31   | 18  | 39  | 25   | 36  | 25  | 59   | 30  | 77  | 55   | 79  | 56  | 79   | 79  | 61  | 62   | 49  | 49  | 49   | 49  | 49  |      |     |  |  |     |  |  |
| 8   | 54  | 36  | 37   | 33  | 29  | -4   | -5  | -24 | 30   | 14  | 46  | 32   | 38  | 21  | 64   | 34  | 79  | 51   | 88  | 65  | 76   | 63  | 54  | 46   | 46  | 46  | 46   | 46  | 46  |      |     |  |  |     |  |  |
| 9   | 57  | 30  | 39   | 33  | 27  | -7   | -10 | -16 | 12   | -14 | 39  | 26   | 38  | 15  | 49   | 43  | 76  | 57   | 82  | 61  | 79   | 65  | 53  | 46   | 46  | 46  | 46   | 46  | 46  |      |     |  |  |     |  |  |
| 10  | 40  | 25  | 35   | 31  | 32  | 19   | 16  | -3  | 17   | -15 | 34  | 29   | 31  | 25  | 67   | 46  | 72  | 54   | 74  | 56  | 85   | 66  | 63  | 40   | 40  | 40  | 40   | 40  | 40  |      |     |  |  |     |  |  |
| 11  | 54  | 25  | 35   | 31  | 19  | -3   | 17  | -4  | 7    | -7  | 38  | 30   | 24  | 19  | 56   | 46  | 81  | 61   | 66  | 51  | 75   | 65  | 63  | 45   | 45  | 45  | 45   | 45  | 45  |      |     |  |  |     |  |  |
| 12  | 51  | 36  | 37   | 34  | 18  | 1    | 5   | -8  | 5    | -10 | 52  | 34   | 27  | 17  | 54   | 40  | 81  | 61   | 61  | 44  | 75   | 68  | 56  | 45   | 45  | 45  | 45   | 45  | 45  |      |     |  |  |     |  |  |
| 13  | 36  | 24  | 40   | 33  | 37  | 16   | 13  | -18 | 17   | 3   | 39  | 27   | 28  | 12  | 47   | 39  | 66  | 51   | 68  | 51  | 70   | 58  | 58  | 42   | 42  | 42  | 42   | 42  | 42  |      |     |  |  |     |  |  |
| 14  | 33  | 25  | 33   | 25  | 25  | 9    | 24  | 6   | 32   | 15  | 39  | 26   | 42  | 13  | 47   | 33  | 66  | 49   | 74  | 57  | 72   | 57  | 54  | 42   | 42  | 42  | 42   | 42  | 42  |      |     |  |  |     |  |  |
| 15  | 36  | 20  | 24   | 20  | 14  | 2    | 28  | 21  | 29   | 18  | 37  | 28   | 53  | 25  | 58   | 32  | 54  | 44   | 69  | 56  | 66   | 57  | 52  | 49   | 49  | 49  | 49   | 49  | 49  |      |     |  |  |     |  |  |
| 16  | 41  | 22  | 20   | 8   | 20  | 3    | 37  | 23  | 17   | -8  | 46  | 34   | 68  | 33  | 56   | 40  | 48  | 42   | 71  | 50  | 72   | 56  | 53  | 41   | 41  | 41  | 41   | 41  | 41  |      |     |  |  |     |  |  |
| 17  | 49  | 26  | 28   | 7   | 2   | -3   | 43  | 21  | -3   | -17 | 42  | 34   | 62  | 37  | 60   | 41  | 60  | 41   | 74  | 49  | 77   | 54  | 53  | 33   | 33  | 33  | 33   | 33  | 33  |      |     |  |  |     |  |  |
| 18  | 33  | 20  | 38   | 18  | 21  | -4   | 40  | 34  | 13   | -9  | 37  | 27   | 66  | 36  | 45   | 39  | 62  | 39   | 75  | 52  | 79   | 58  | 52  | 40   |     |     |      |     |     |      |     |  |  |     |  |  |
| 19  | 32  | 17  | 33   | 17  | 29  | 13   | 46  | 28  | 26   | 1   | 30  | 26   | 62  | 39  | 41   | 37  | 70  | 47   | 77  | 53  | 76   | 56  | 57  | 37   |     |     |      |     |     |      |     |  |  |     |  |  |
| 20  | 35  | 16  | 34   | 25  | 28  | 18   | 43  | 8   | 35   | 25  | 25  | 16   | 62  | 30  | 61   | 40  | 77  | 53   | 71  | 59  | 74   | 53  | 54  | 34   | 34  | 34  | 34   | 34  | 34  |      |     |  |  |     |  |  |
| 21  | 41  | 17  | 24   | 12  | 27  | 13   | 19  | 2   | 32   | 27  | 27  | 18   | 68  | 37  | 48   | 42  | 76  | 61   | 74  | 54  | 74   | 52  | 47  | 28   |     |     |      |     |     |      |     |  |  |     |  |  |
| 22  | 37  | 34  | 18   | 3   | 34  | 28   | 39  | 8   | 32   | 19  | 32  | 23   | 73  | 47  | 46   | 39  | 74  | 60   | 75  | 54  | 67   | 48  | 55  | 27   |     |     |      |     |     |      |     |  |  |     |  |  |
| 23  | 48  | 36  | 19   | 0   | 32  | 27   | 40  | 33  | 20   | 15  | 38  | 22   | 62  | 40  | 60   | 35  | 72  | 56   | 74  | 53  | 66   | 42  | 59  | 48   |     |     |      |     |     |      |     |  |  |     |  |  |
| 24  | 51  | 34  | 31   | 21  | 33  | 31   | 32  | 12  | 18   | 9   | 45  | 23   | 55  | 39  | 63   | 38  | 76  | 56   | 79  | 58  | 65   | 44  | 48  | 44   |     |     |      |     |     |      |     |  |  |     |  |  |
| 25  | 34  | 31  | 32   | 29  | 32  | 29   | 28  | 8   | 11   | -4  | 50  | 26   | 54  | 39  | 57   | 42  | 70  | 56   | 78  | 57  | 69   | 42  | 58  | 41   |     |     |      |     |     |      |     |  |  |     |  |  |
| 26  | 45  | 28  | 47   | 29  | 30  | 28   | 29  | 20  | 16   | -7  | 44  | 31   | 52  | 35  | 57   | 42  | 76  | 58   | 73  | 62  | 69   | 56  | 61  | 38   |     |     |      |     |     |      |     |  |  |     |  |  |
| 27  | 58  | 30  | 35   | 34  | 30  | 10   | 36  | 18  | 15   | -18 | 34  | 21   | 45  | 39  | 63   | 42  | 74  | 64   | 79  | 65  | 78   | 58  | 69  | 44   |     |     |      |     |     |      |     |  |  |     |  |  |
| 28  | 52  | 38  | 38   | 31  | 20  | 12   | 28  | 21  | 23   | -5  | 45  | 18   | 55  | 41  | 54   | 44  | 76  | 63   | 80  | 62  | 78   | 62  | 61  | 41   |     |     |      |     |     |      |     |  |  |     |  |  |
| 29  | 53  | 29  | 31   | 9   | 11  | 1    | 25  | -3  | 25   | -3  | 47  | 28   | 45  | 32  | 65   | 51  | 72  | 65   | 71  | 58  | 78   | 57  | 57  | 40   |     |     |      |     |     |      |     |  |  |     |  |  |
| 30  | 29  | 22  | 22   | 7   | 21  | 7    | 2   | -18 | 27   | -18 | 55  | 28   | 41  | 31  | 65   | 50  | 66  | 60   | 77  | 56  | 82   | 68  | 54  | 31   |     |     |      |     |     |      |     |  |  |     |  |  |
| 31  | 36  | 21  |      |     | 37  | 22   | -1  | -24 |      |     | 56  | 33   |     |     | 63   | 50  |     |      | 79  | 58  | 82   |     |     |      |     |     |      |     |     |      |     |  |  |     |  |  |
| AVG | 46  | 30  | 33   | 23  | 26  | 11   | 25  | 6   | 22   | 3   | 40  | 26   | 47  | 30  | 56   | 40  | 69  | 52   | 75  | 57  | 75   | 57  | 60  | 44   |     |     |      |     |     |      |     |  |  |     |  |  |
| MAX | 68  | 48  | 51   | 35  | 42  | 32   | 46  | 34  | 45   | 27  | 56  | 73   | 73  | 47  | 67   | 51  | 81  | 65   | 88  | 65  | 85   | 68  | 80  | 66   |     |     |      |     |     |      |     |  |  |     |  |  |
| MIN | 29  | 16  | 18   | 0   | 2   | -9   | -6  | -24 | -3   | -21 | 25  | 11   | 24  | 12  | 41   | 30  | 48  | 34   | 61  | 44  | 65   | 42  | 47  | 22   |     |     |      |     |     |      |     |  |  |     |  |  |

ARS W-3 WATERSHED NEAR DANVILLE, VERMONT

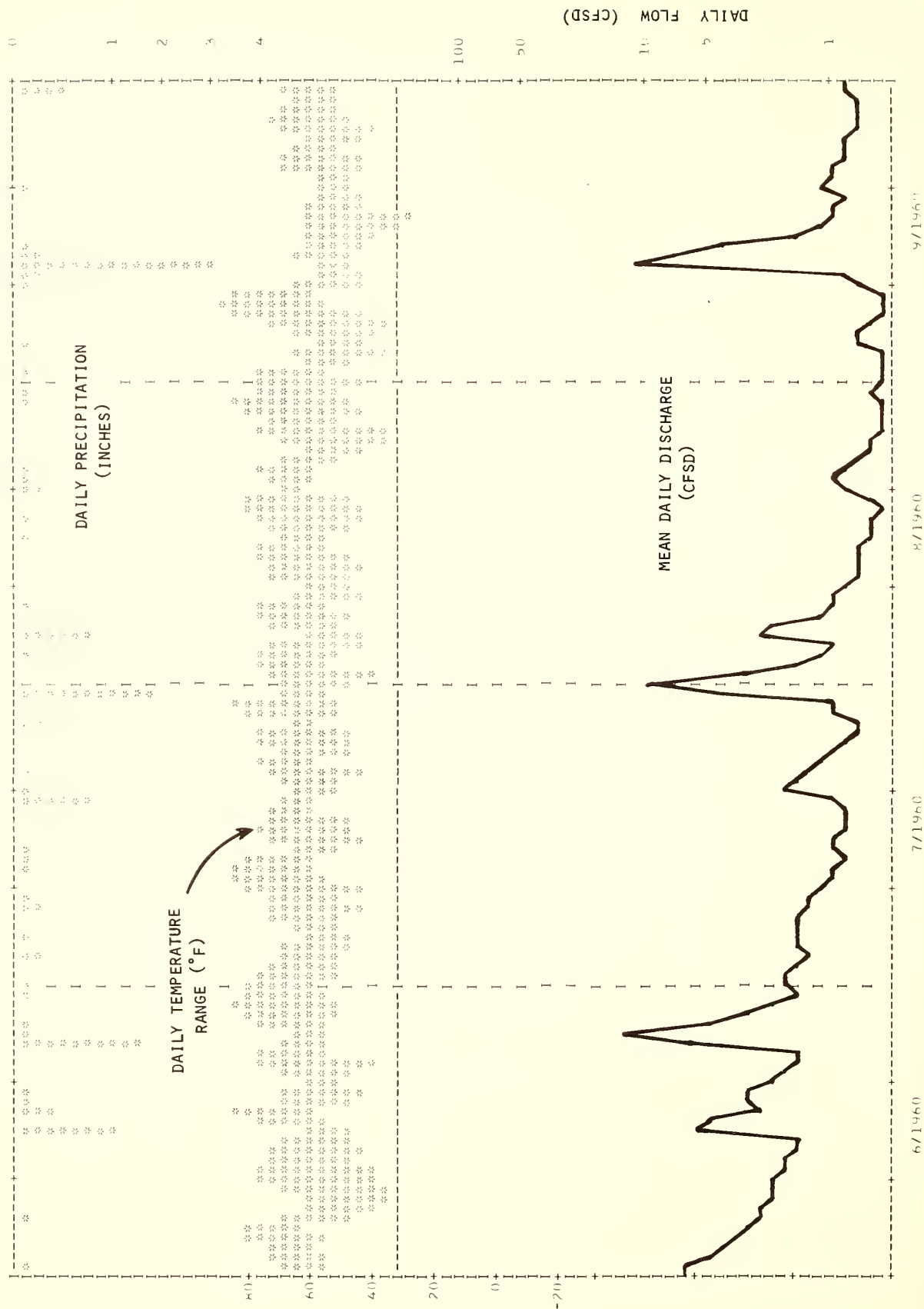
STATION R-3 MAX-MIN TEMPERATURES, IN DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

| DAY | OCT |     |        | NOV |     |        | DEC |     |        | JAN |     |        | FEB |     |        | MAR |     |        | APR |     |        | MAY |     |        | JUN |     |        | JUL |     |        | AUG |  |  | SEP |  |  |
|-----|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|--|--|-----|--|--|
|     | MAX | MIN | PRECIP | MAX | MIN | PRECIP | MAX | MIN | PRECIP | MAX | MIN | PRECIP | MAX | MIN | PRECIP | MAX | MIN | PRECIP | MAX | MIN | PRECIP | MAX | MIN | PRECIP | MAX | MIN | PRECIP | MAX | MIN | PRECIP |     |  |  |     |  |  |
| 1   | 62  | 33  | 45     | 38  | 28  | 20     | 30  | 19  | 7      | 0   | 41  | 23     | 34  | 20  | 52     | 25  | 65  | 46     | 69  | 49  | 72     | 50  | 66  | 41     | 69  | 49  | 72     | 50  | 66  | 41     |     |  |  |     |  |  |
| 2   | 58  | 38  | 50     | 30  | 27  | 10     | 16  | -1  | 3      | -6  | 29  | 12     | 36  | 18  | 46     | 20  | 66  | 46     | 68  | 49  | 75     | 51  | 63  | 49     | 75  | 51  | 63     | 49  | 75  | 51     |     |  |  |     |  |  |
| 3   | 59  | 38  | 50     | 30  | 28  | 18     | 16  | 10  | 10     | -13 | 33  | 24     | 37  | 34  | 54     | 28  | 70  | 42     | 73  | 58  | 78     | 53  | 64  | 51     | 78  | 53  | 64     | 51  | 78  | 53     |     |  |  |     |  |  |
| 4   | 63  | 35  | 50     | 30  | 41  | 26     | 21  | 7   | 8      | -8  | 48  | 34     | 55  | 40  | 38     | 28  | 70  | 42     | 77  | 61  | 76     | 64  | 51  | 78     | 53  | 64  | 51     | 78  | 53  |        |     |  |  |     |  |  |
| 5   | 57  | 46  | 31     | 22  | 53  | 32     | 17  | 4   | 0      | -7  | 46  | 32     | 47  | 34  | 45     | 24  | 78  | 50     | 65  | 61  | 66     | 56  | 63  | 42     | 65  | 61  | 66     | 56  | 63  | 42     |     |  |  |     |  |  |
| 6   | 52  | 37  | 23     | 19  | 54  | 38     | 20  | 4   | 19     | -3  | 50  | 25     | 34  | 25  | 45     | 29  | 73  | 53     | 72  | 55  | 70     | 51  | 62  | 49     | 72  | 55  | 70     | 51  | 62  | 49     |     |  |  |     |  |  |
| 7   | 53  | 33  | 30     | 19  | 32  | 17     | 23  | -11 | 21     | -7  | 55  | 30     | 44  | 18  | 42     | 32  | 70  | 44     | 72  | 59  | 74     | 51  | 66  | 49     | 72  | 59  | 74     | 51  | 66  | 49     |     |  |  |     |  |  |
| 8   | 62  | 32  | 26     | 20  | 26  | 11     | 12  | -1  | 12     | -7  | 58  | 33     | 49  | 18  | 45     | 31  | 77  | 47     | 75  | 61  | 73     | 58  | 63  | 49     | 75  | 61  | 73     | 58  | 63  | 49     |     |  |  |     |  |  |
| 9   | 64  | 37  | 27     | 17  | 26  | 20     | 12  | -12 | 12     | -13 | 58  | 33     | 29  | 14  | 56     | 35  | 77  | 47     | 81  | 65  | 67     | 58  | 71  | 52     | 67  | 58  | 67     | 58  | 71  | 52     |     |  |  |     |  |  |
| 10  | 55  | 39  | 23     | 14  | 43  | 28     | 17  | -3  | 16     | -12 | 27  | 15     | 26  | 13  | 41     | 37  | 84  | 59     | 74  | 51  | 70     | 49  | 64  | 54     | 74  | 51  | 70     | 49  | 64  | 54     |     |  |  |     |  |  |
| 11  | 56  | 33  | 26     | 18  | 28  | 25     | 21  | 5   | 20     | 10  | 22  | 11     | 19  | 52  | 38     | 68  | 51  | 64     | 50  | 73  | 47     | 73  | 57  | 73     | 47  | 73  | 57     | 73  | 57  |        |     |  |  |     |  |  |
| 12  | 64  | 38  | 23     | 14  | 25  | 20     | 9   | -7  | 21     | -7  | 44  | 3      | 44  | 21  | 46     | 62  | 38  | 69     | 51  | 77  | 50     | 72  | 54  | 77     | 50  | 72  | 54     | 77  | 54  |        |     |  |  |     |  |  |
| 13  | 70  | 44  | 33     | 18  | 29  | 8      | -19 | -19 | 33     | 13  | 15  | 0      | 37  | 34  | 50     | 41  | 67  | 77     | 52  | 77  | 52     | 76  | 59  | 37     | 77  | 52  | 76     | 59  | 37  |        |     |  |  |     |  |  |
| 14  | 57  | 36  | 33     | 18  | 35  | 20     | 28  | -7  | 23     | -9  | 14  | 10     | 58  | 33  | 67     | 40  | 67  | 45     | 83  | 69  | 69     | 52  | 59  | 37     | 83  | 69  | 69     | 52  | 59  | 37     |     |  |  |     |  |  |
| 15  | 50  | 33  | 41     | 35  | 19  | 9      | 32  | -7  | 10     | -13 | 33  | 10     | 48  | 34  | 83     | 48  | 70  | 44     | 73  | 60  | 66     | 45  | 59  | 37     | 73  | 60  | 66     | 45  | 59  | 37     |     |  |  |     |  |  |
| 16  | 42  | 36  | 38     | 21  | 16  | 8      | 10  | -5  | 20     | -5  | 33  | 23     | 36  | 30  | 59     | 49  | 61  | 49     | 66  | 45  | 72     | 44  | 54  | 37     | 66  | 45  | 72     | 44  | 54  | 37     |     |  |  |     |  |  |
| 17  | 39  | 33  | 38     | 19  | 15  | 7      | -5  | -22 | 27     | 11  | 33  | 16     | 56  | 28  | 59     | 42  | 70  | 56     | 69  | 44  | 74     | 50  | 63  | 36     | 69  | 44  | 74     | 50  | 63  | 36     |     |  |  |     |  |  |
| 18  | 43  | 31  | 29     | 16  | 6   | -5     | 9   | -23 | 19     | 1   | 22  | 9      | 50  | 31  | 58     | 36  | 70  | 48     | 74  | 55  | 71     | 52  | 52  | 35     | 74  | 55  | 71     | 52  | 52  | 35     |     |  |  |     |  |  |
| 19  | 45  | 32  | 29     | 12  | 8   | -8     | 17  | 1   | 27     | 2   | 30  | 9      | 40  | 24  | 52     | 29  | 71  | 48     | 70  | 53  | 74     | 53  | 60  | 35     | 70  | 53  | 74     | 53  | 60  | 35     |     |  |  |     |  |  |
| 20  | 40  | 35  | 24     | 14  | 35  | 5      | 16  | -8  | 33     | 22  | 19  | 3      | 46  | 21  | 54     | 33  | 72  | 54     | 65  | 49  | 74     | 51  | 66  | 56     | 65  | 49  | 74     | 51  | 66  | 56     |     |  |  |     |  |  |
| 21  | 46  | 29  | 38     | 13  | 44  | 13     | 34  | 16  | 30     | 18  | 24  | 8      | 61  | 29  | 56     | 34  | 67  | 54     | 70  | 48  | 78     | 54  | 58  | 45     | 70  | 48  | 78     | 54  | 58  | 45     |     |  |  |     |  |  |
| 22  | 53  | 31  | 43     | 35  | 12  | 1      | 34  | 13  | 40     | 21  | 25  | 5      | 65  | 40  | 67     | 47  | 68  | 52     | 70  | 47  | 79     | 58  | 54  | 38     | 70  | 47  | 79     | 58  | 54  | 38     |     |  |  |     |  |  |
| 23  | 63  | 34  | 42     | 32  | 21  | 4      | 37  | 14  | 37     | 7   | 43  | 6      | 54  | 37  | 50     | 43  | 67  | 50     | 73  | 50  | 70     | 57  | 41  | 31     | 73  | 50  | 70     | 57  | 41  | 31     |     |  |  |     |  |  |
| 24  | 63  | 41  | 40     | 34  | -10 | 30     | 18  | 17  | 17     | 1   | 37  | 6      | 56  | 28  | 51     | 42  | 68  | 48     | 66  | 54  | 72     | 55  | 47  | 28     | 66  | 54  | 72     | 55  | 47  | 28     |     |  |  |     |  |  |
| 25  | 52  | 38  | 45     | 29  | 29  | -6     | 33  | 21  | 24     | 8   | 15  | 3      | 43  | 25  | 52     | 44  | 62  | 51     | 70  | 51  | 66     | 47  | 46  | 34     | 70  | 51  | 66     | 47  | 46  | 34     |     |  |  |     |  |  |
| 26  | 57  | 42  | 37     | 19  | 45  | 29     | 42  | 28  | 20     | 6   | 33  | 5      | 41  | 32  | 44     | 41  | 53  | 49     | 71  | 49  | 67     | 46  | 51  | 43     | 71  | 49  | 67     | 46  | 51  | 43     |     |  |  |     |  |  |
| 27  | 48  | 26  | 36     | 31  | 35  | 34     | 49  | 34  | 31     | 17  | 25  | 7      | 60  | 32  | 54     | 40  | 64  | 47     | 68  | 58  | 72     | 57  | 67  | 45     | 68  | 58  | 72     | 57  | 67  | 45     |     |  |  |     |  |  |
| 28  | 49  | 21  | 46     | 36  | 34  | 28     | 37  | 30  | 40     |     | 18  | -6     | 73  | 38  | 54     | 42  | 69  | 45     | 70  | 55  | 70     | 52  | 60  | 52     | 70  | 55  | 70     | 52  | 60  | 52     |     |  |  |     |  |  |
| 29  | 43  | 30  | 43     | 36  | 36  | 32     | 32  | 24  |        |     | 28  | -8     | 66  | 47  | 47     | 44  | 67  | 52     | 73  | 56  | 57     | 55  | 63  | 51     | 73  | 56  | 57     | 55  | 63  | 51     |     |  |  |     |  |  |
| 30  | 53  | 39  | 32     | 28  | 34  | 40     | 25  | 25  |        |     | 34  | 20     | 65  | 46  |        | 43  | 74  | 53     | 65  | 54  | 63     | 51  |     |        | 65  | 54  | 63     | 51  |     |        |     |  |  |     |  |  |
| 31  | 52  | 34  |        | 21  | 15  | 45     | 12  |     |        |     | 44  | 31     |     |     | 61     | 42  |     | 72     | 50  | 54  | 72     | 49  |     |        | 72  | 50  | 54     | 72  | 49  |        |     |  |  |     |  |  |
| AVG | 54  | 36  | 36     | 25  | 29  | 14     | 24  | 6   | 21     | 2   | 31  | 13     | 47  | 29  | 53     | 37  | 69  | 49     | 71  | 53  | 71     | 52  | 60  | 44     | 71  | 53  | 71     | 52  | 60  | 44     |     |  |  |     |  |  |
| MAX | 70  | 56  | 56     | 38  | 54  | 38     | 49  | 43  | 40     | -13 | 55  | 34     | 73  | 47  | 83     | 49  | 84  | 62     | 83  | 65  | 79     | 64  | 76  | 59     | 83  | 65  | 79     | 64  | 76  | 59     |     |  |  |     |  |  |
| MIN | 29  | 21  | 23     | 12  | 6   | -10    | -5  | -23 | 0      | -23 | 14  | -8     | 20  | 13  | 38     | 20  | 53  | 38     | 64  | 44  | 57     | 44  | 41  | 29     | 64  | 44  | 57     | 44  | 41  | 29     |     |  |  |     |  |  |

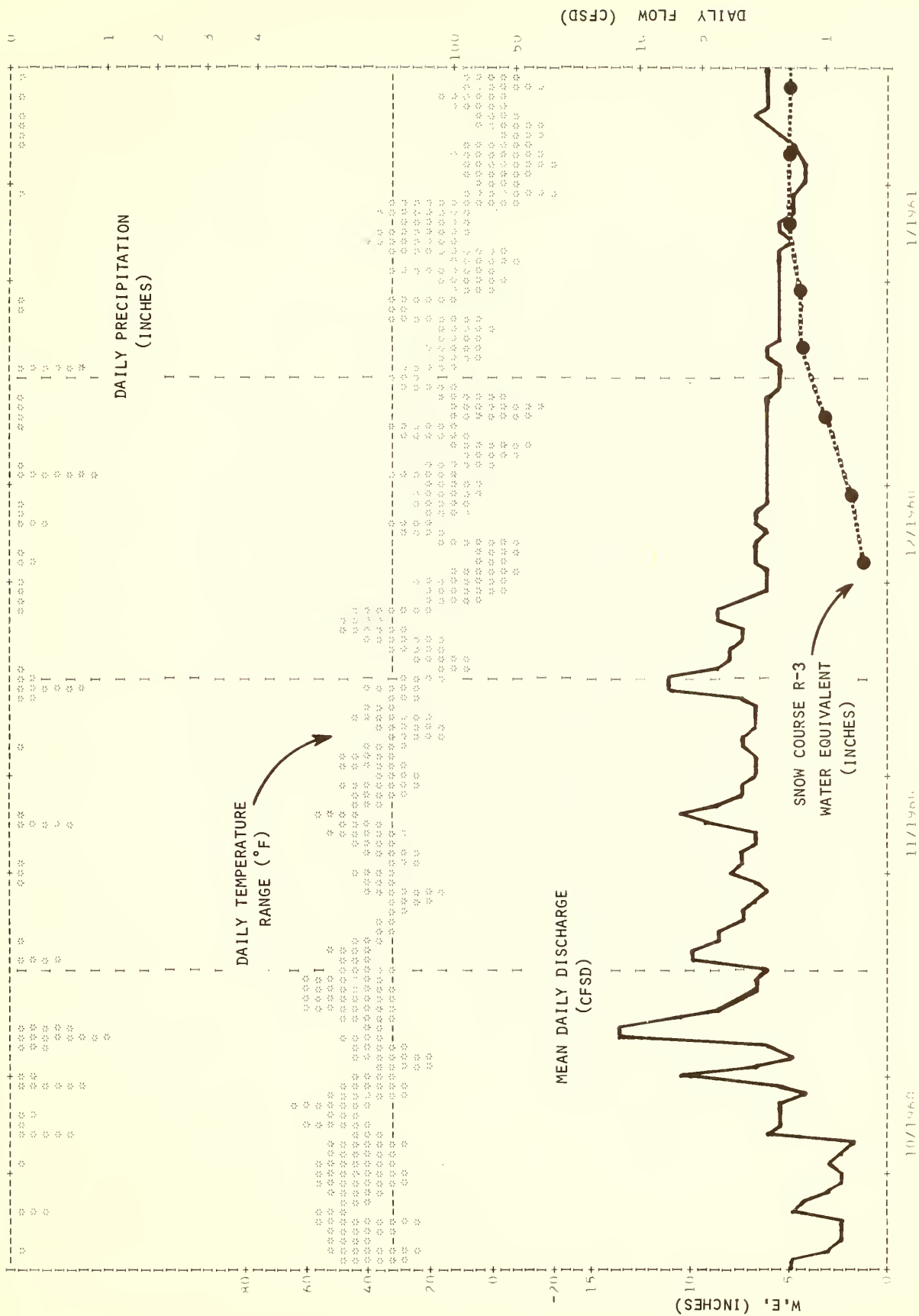


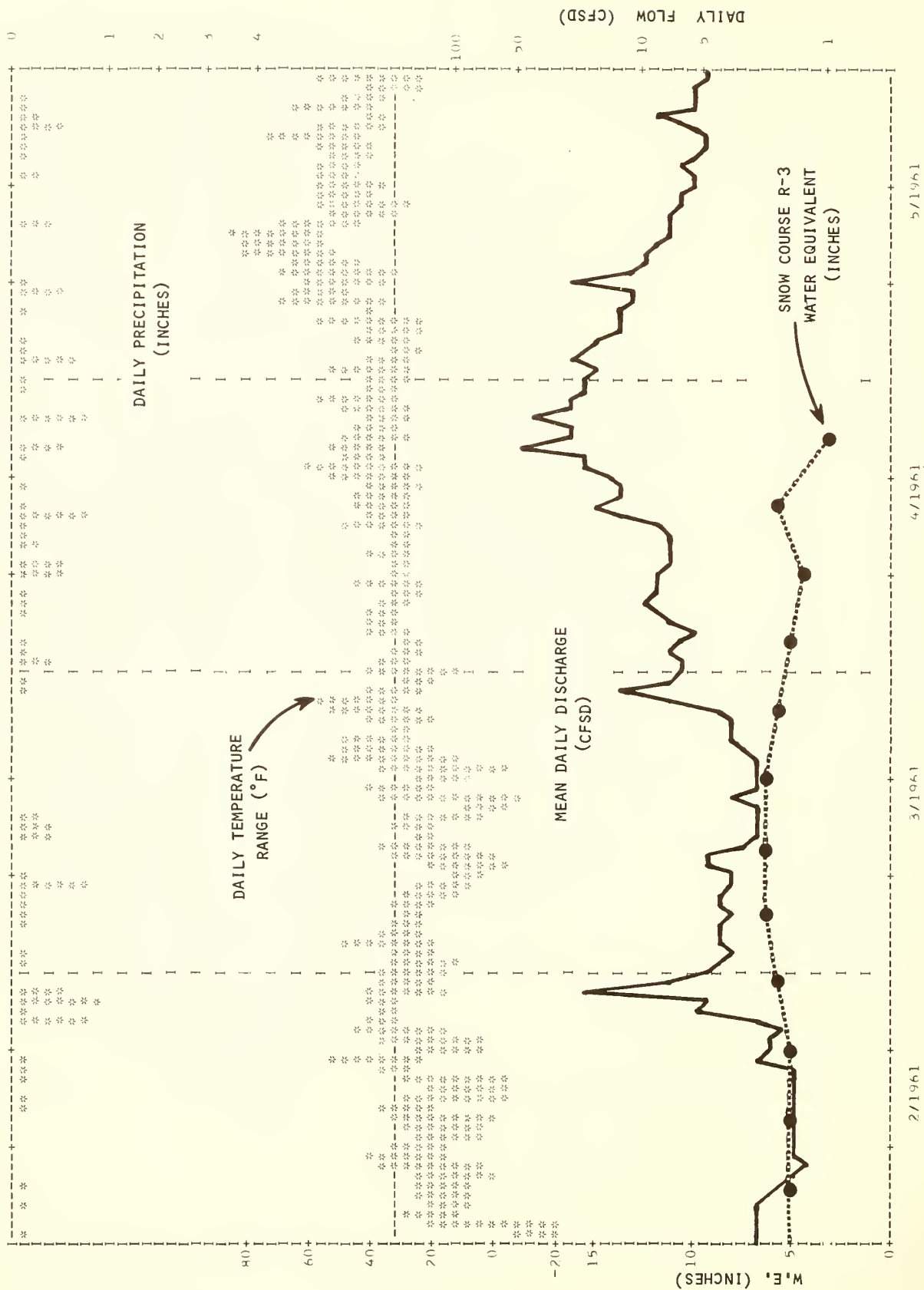




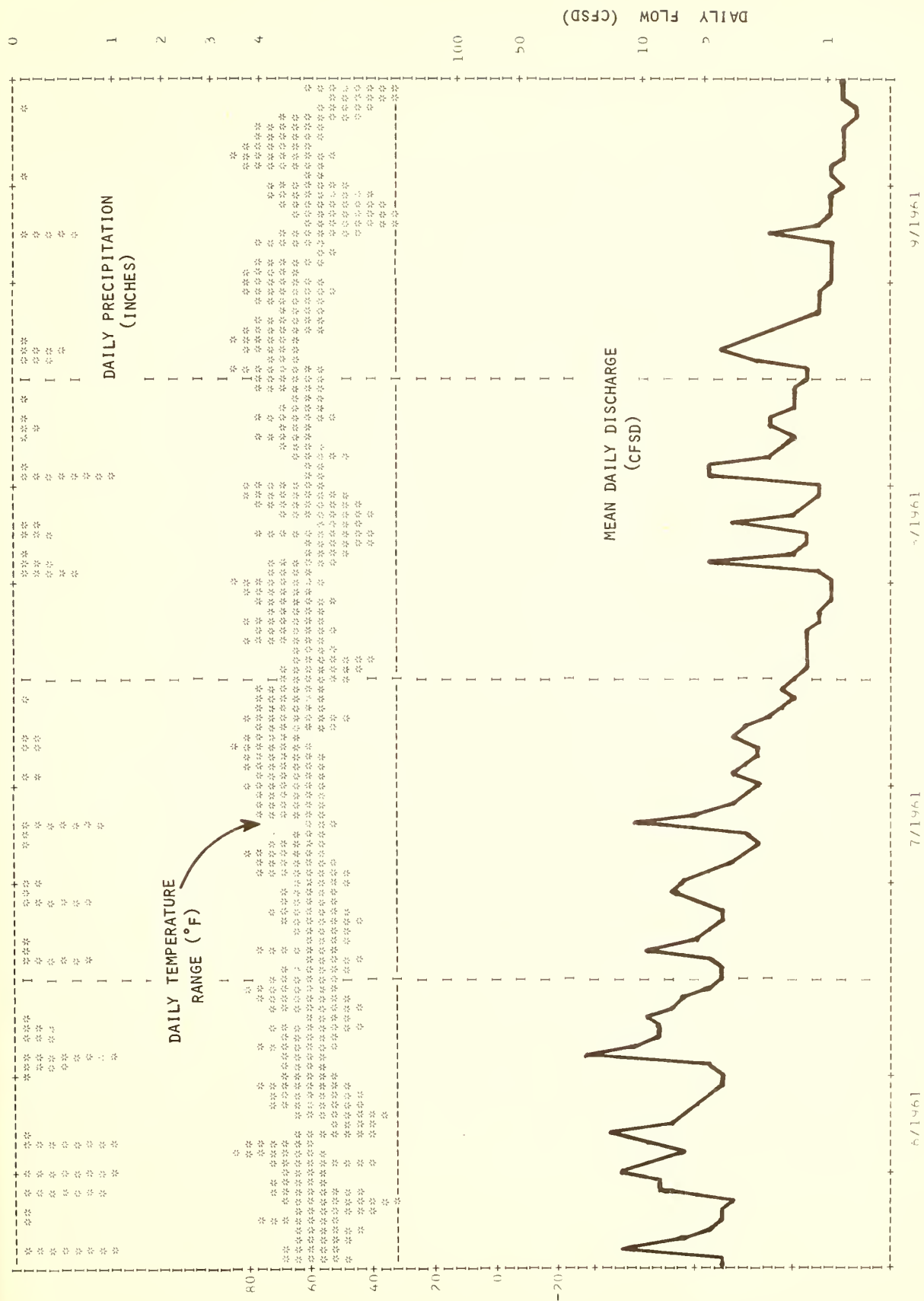


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT --- JUN 1960 - SEP 1960



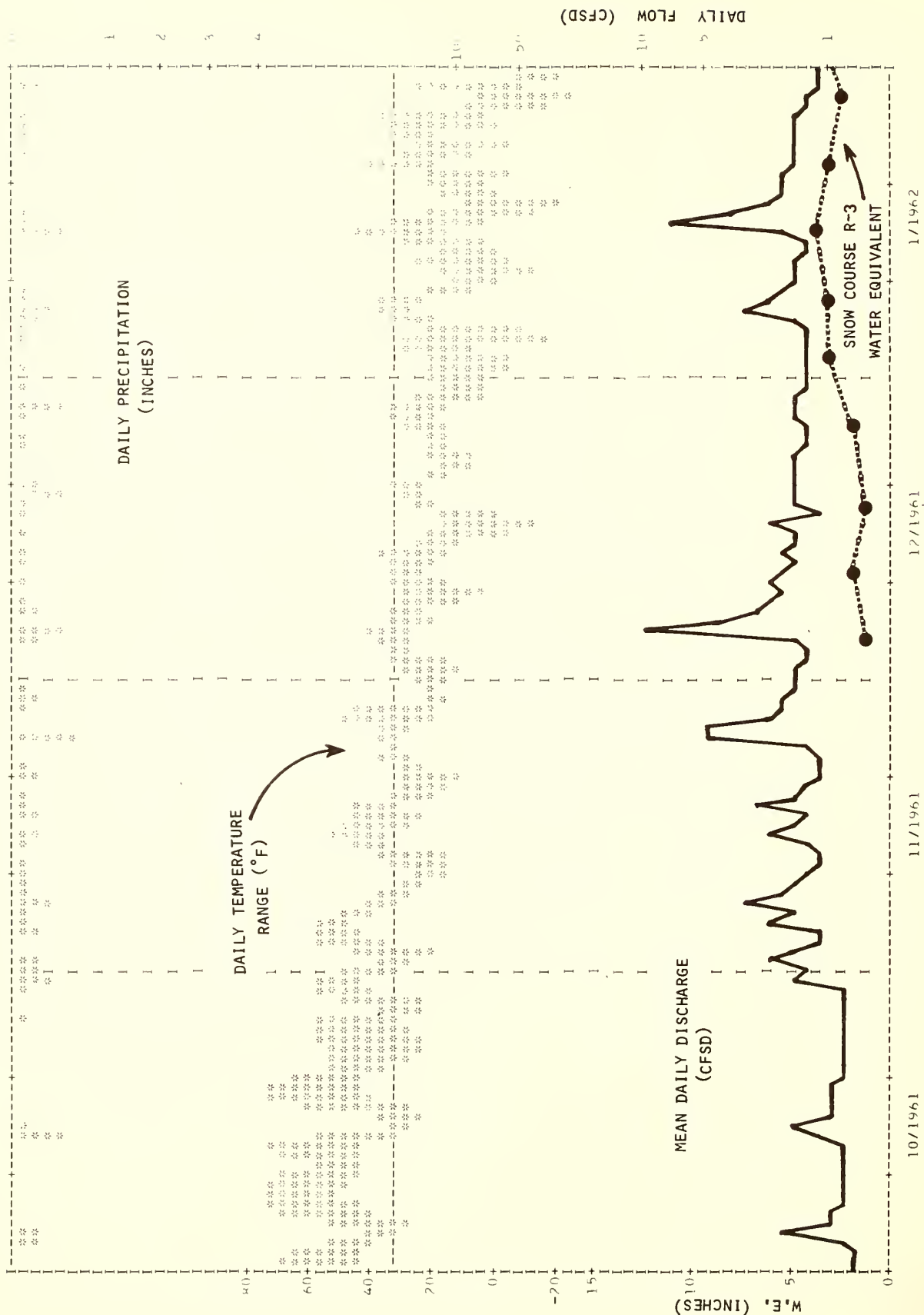


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- FEB 1961 - MAY 1961

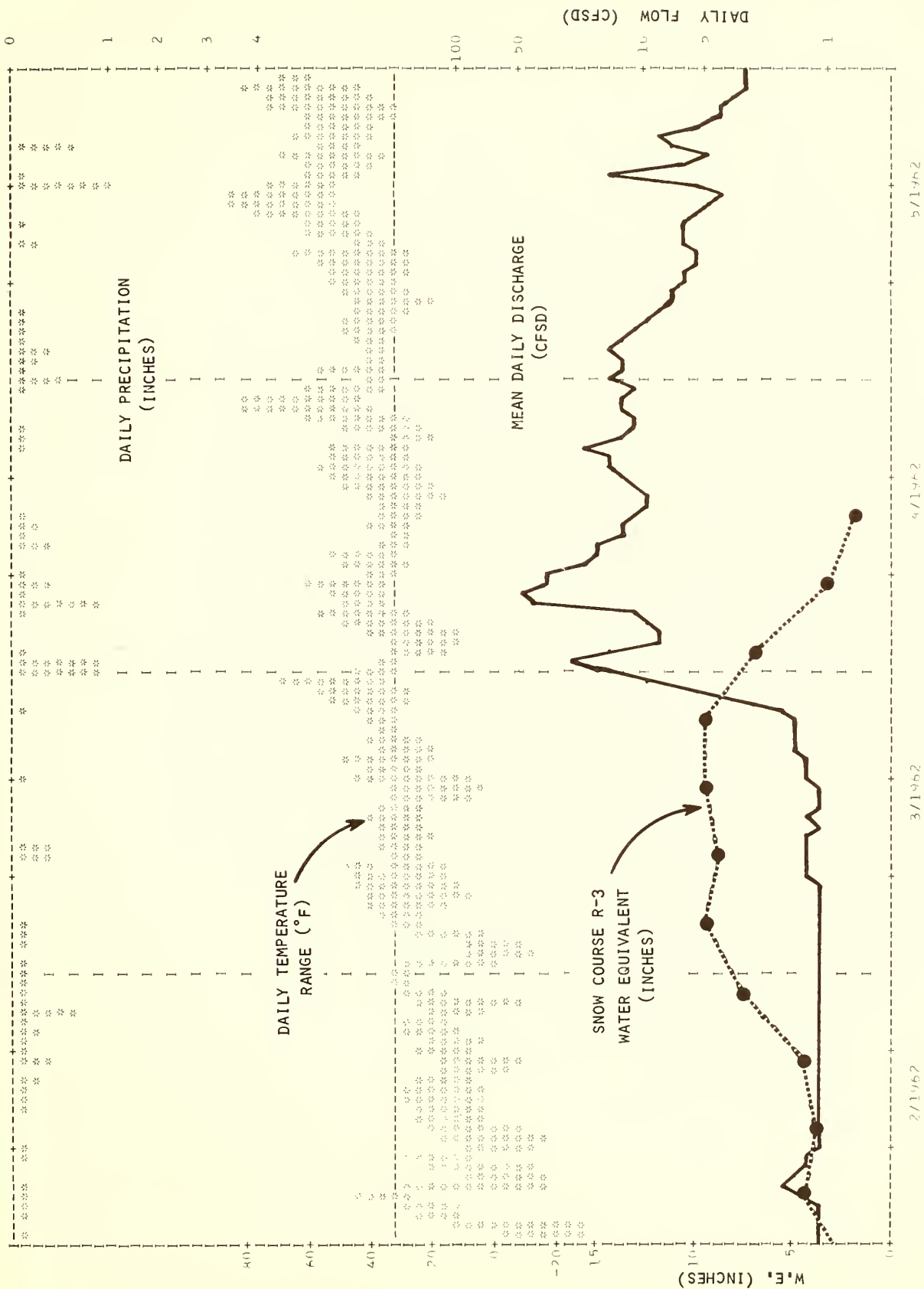


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- JUN 1961 -- SEP 1961

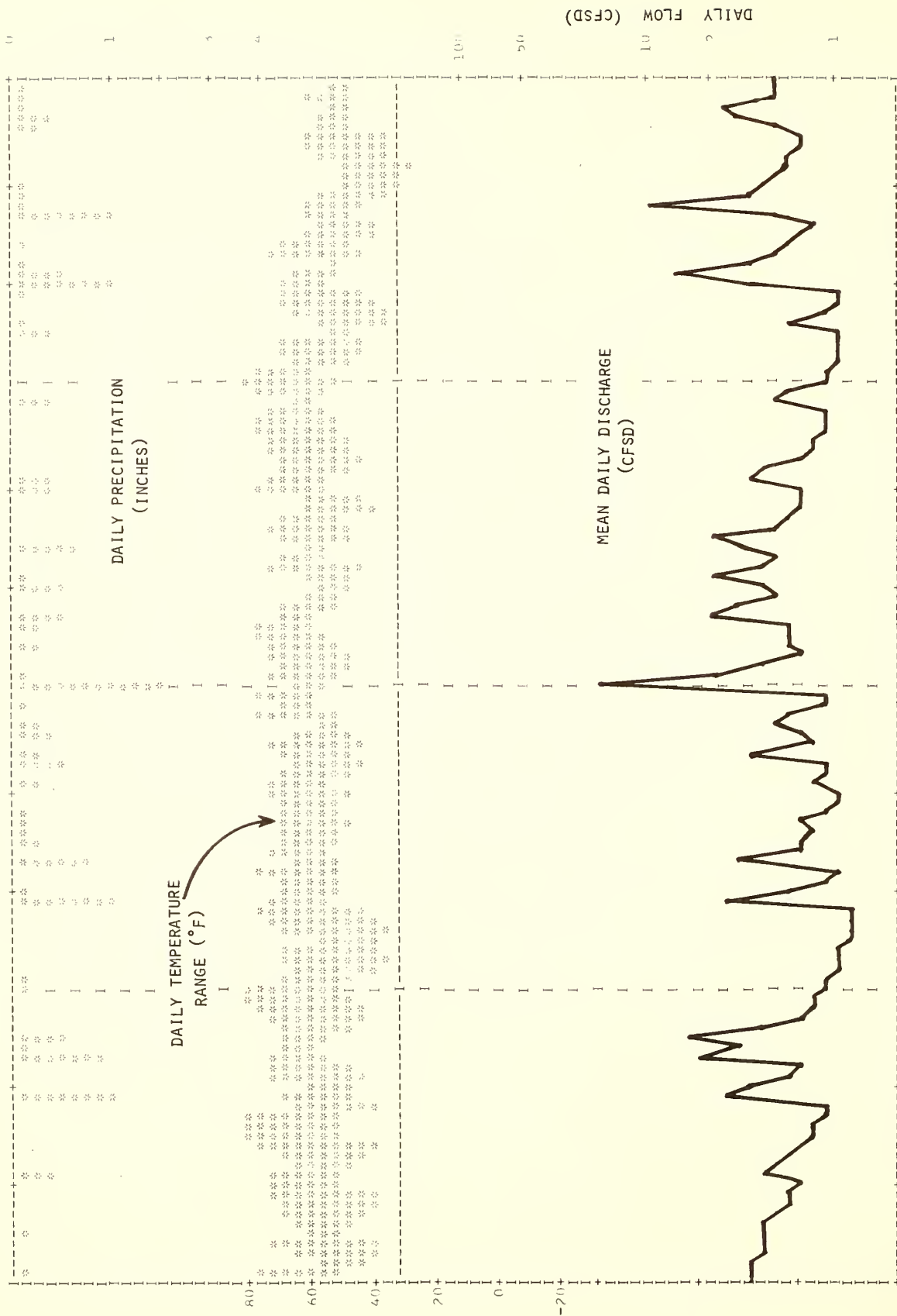




SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- OCT 1961 - JAN 1962



SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- FEB 1962 -- MAY 1962



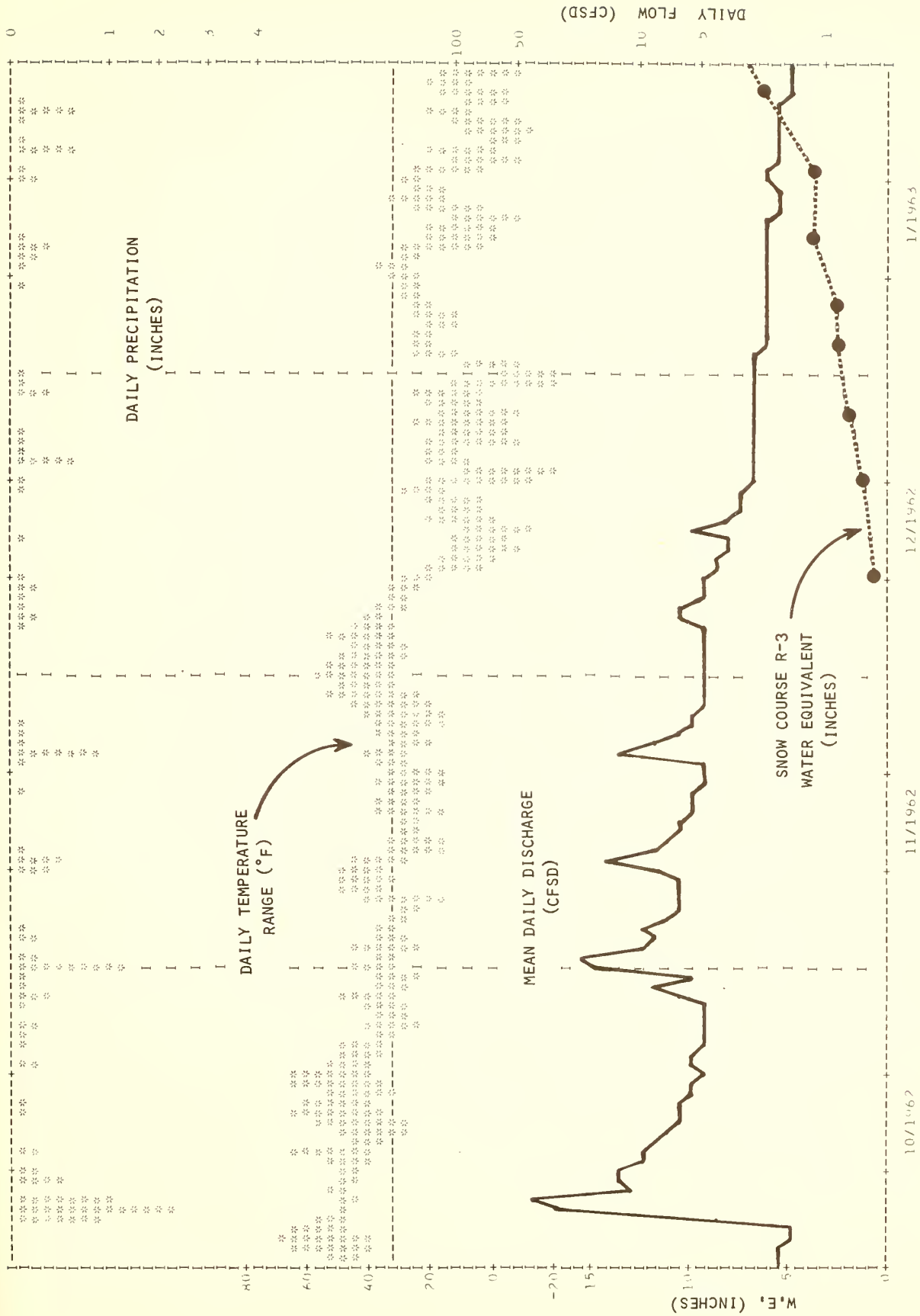
9/1962

8/1962

7/1962

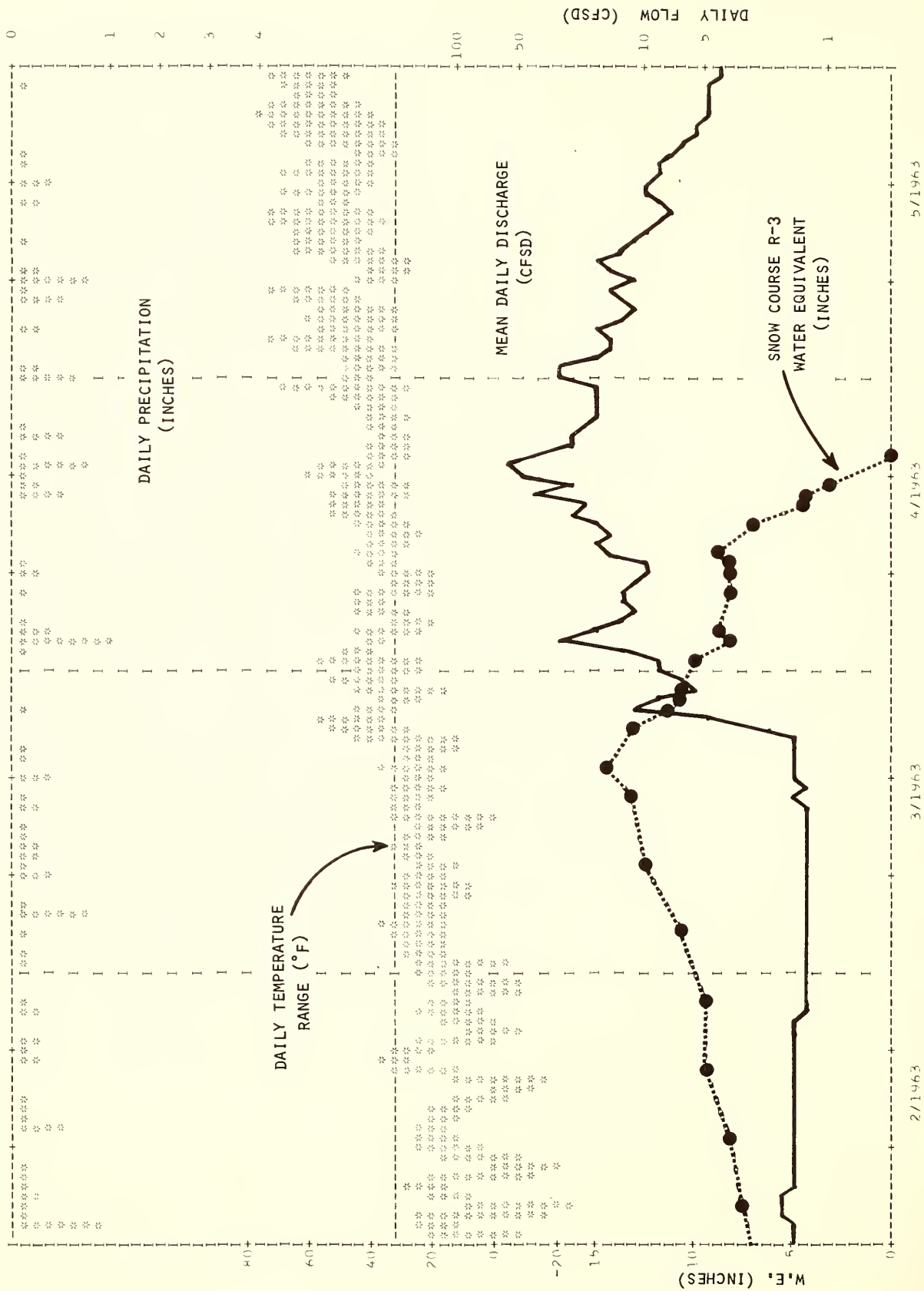
6/1962

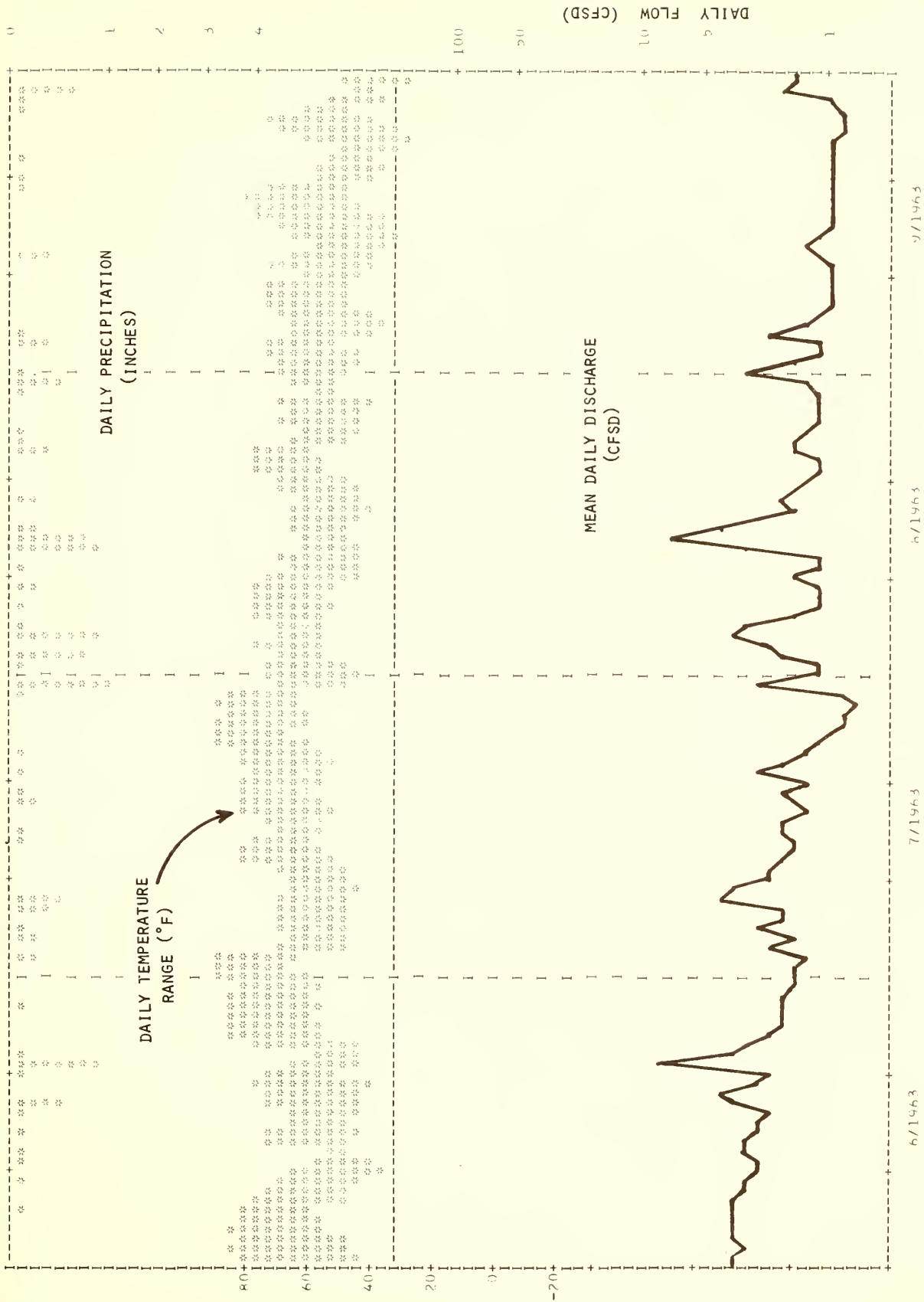
SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- JUN 1962 - SEP 1962



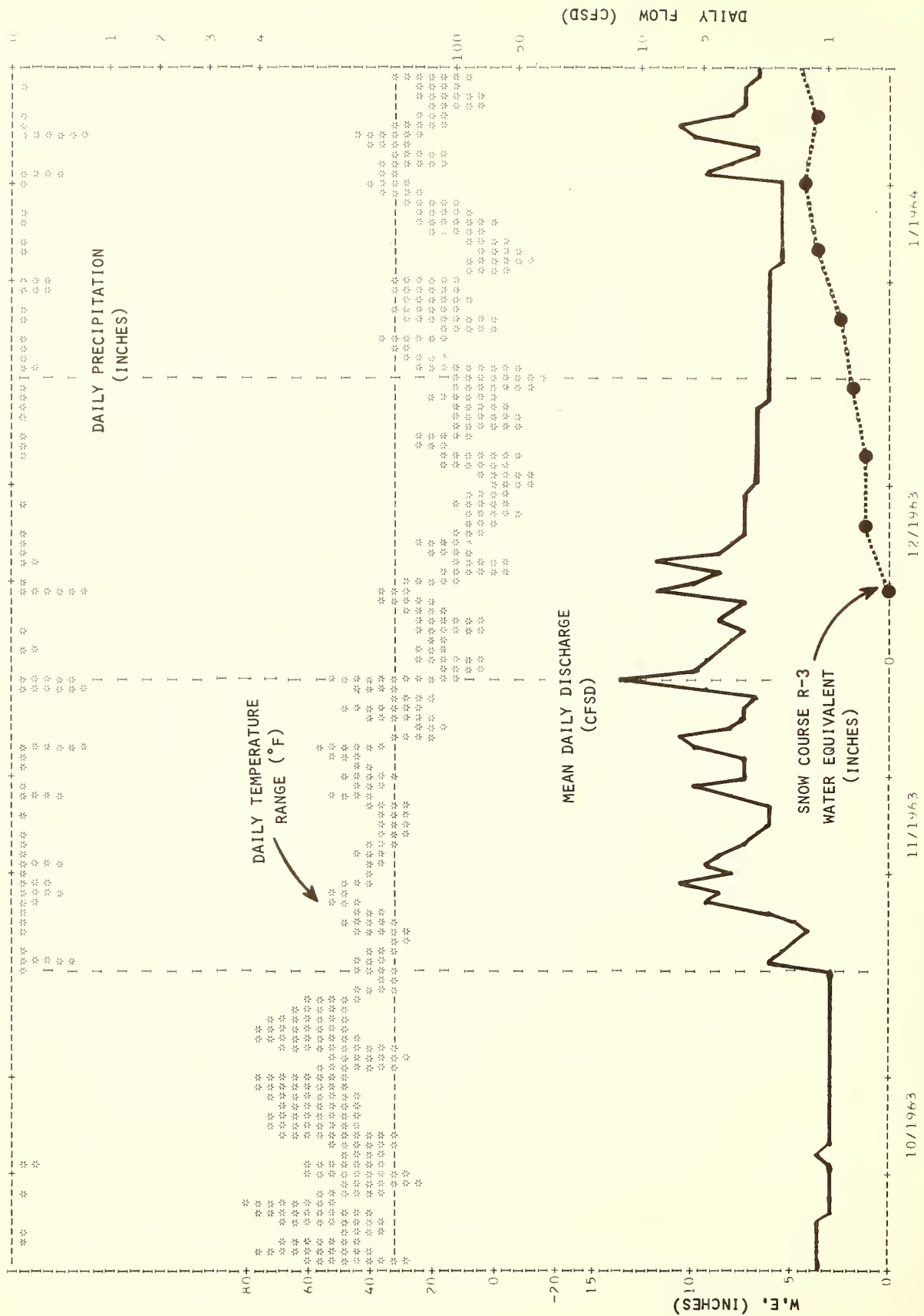
SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- Oct 1962 - JAN 1963



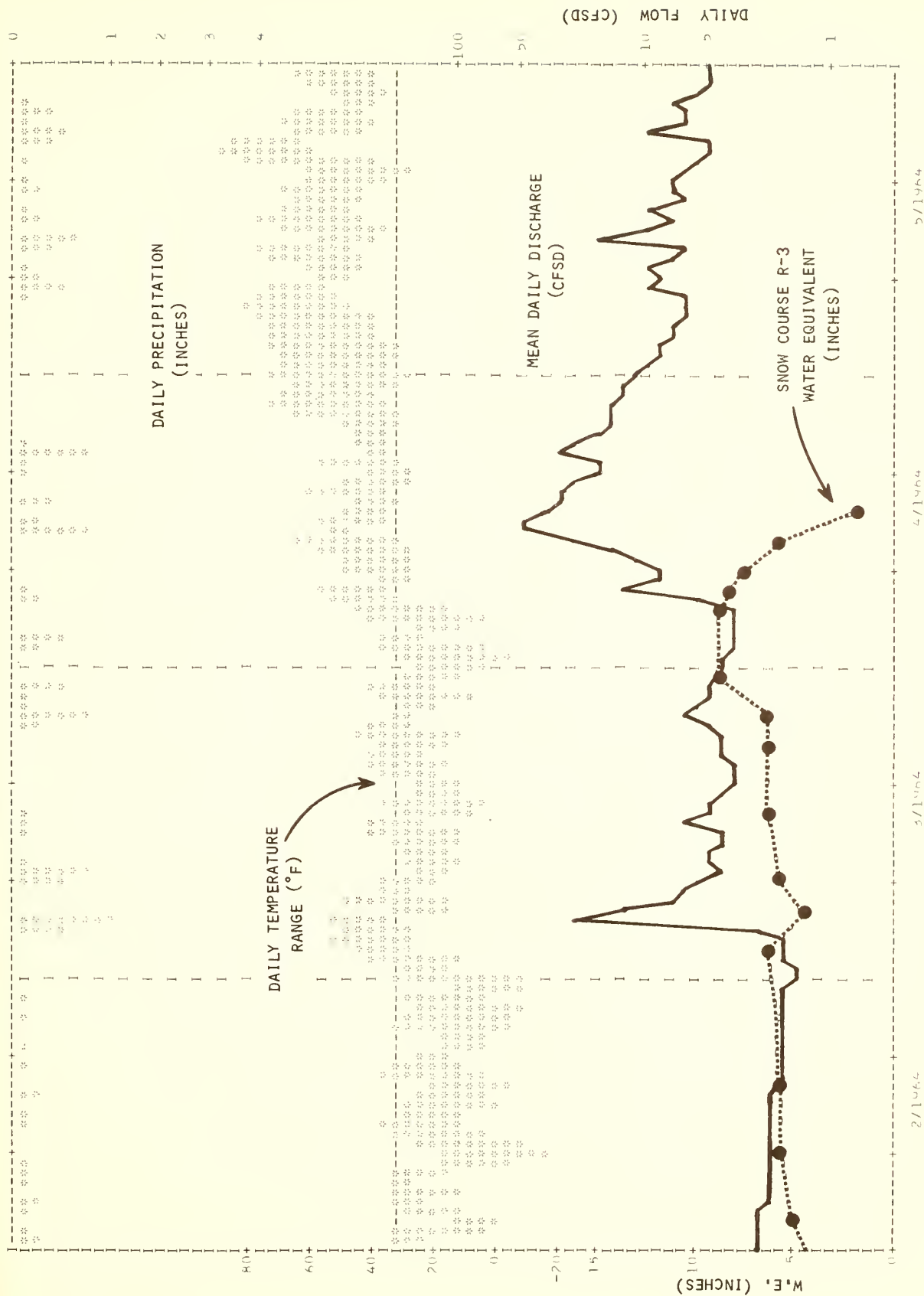




SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- JUN 1963 - SEP 1963

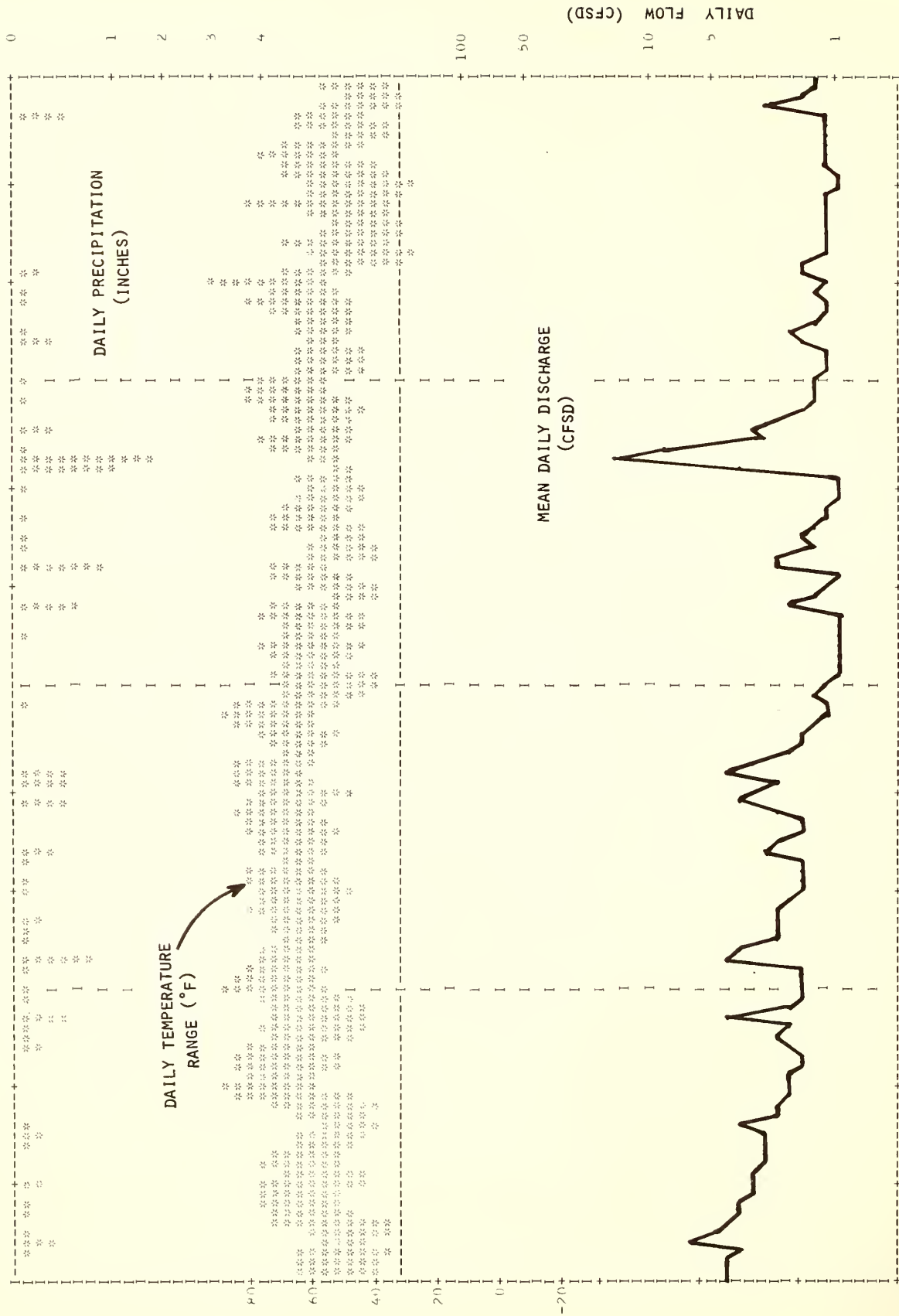


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- OCT 1963 - JAN 1964

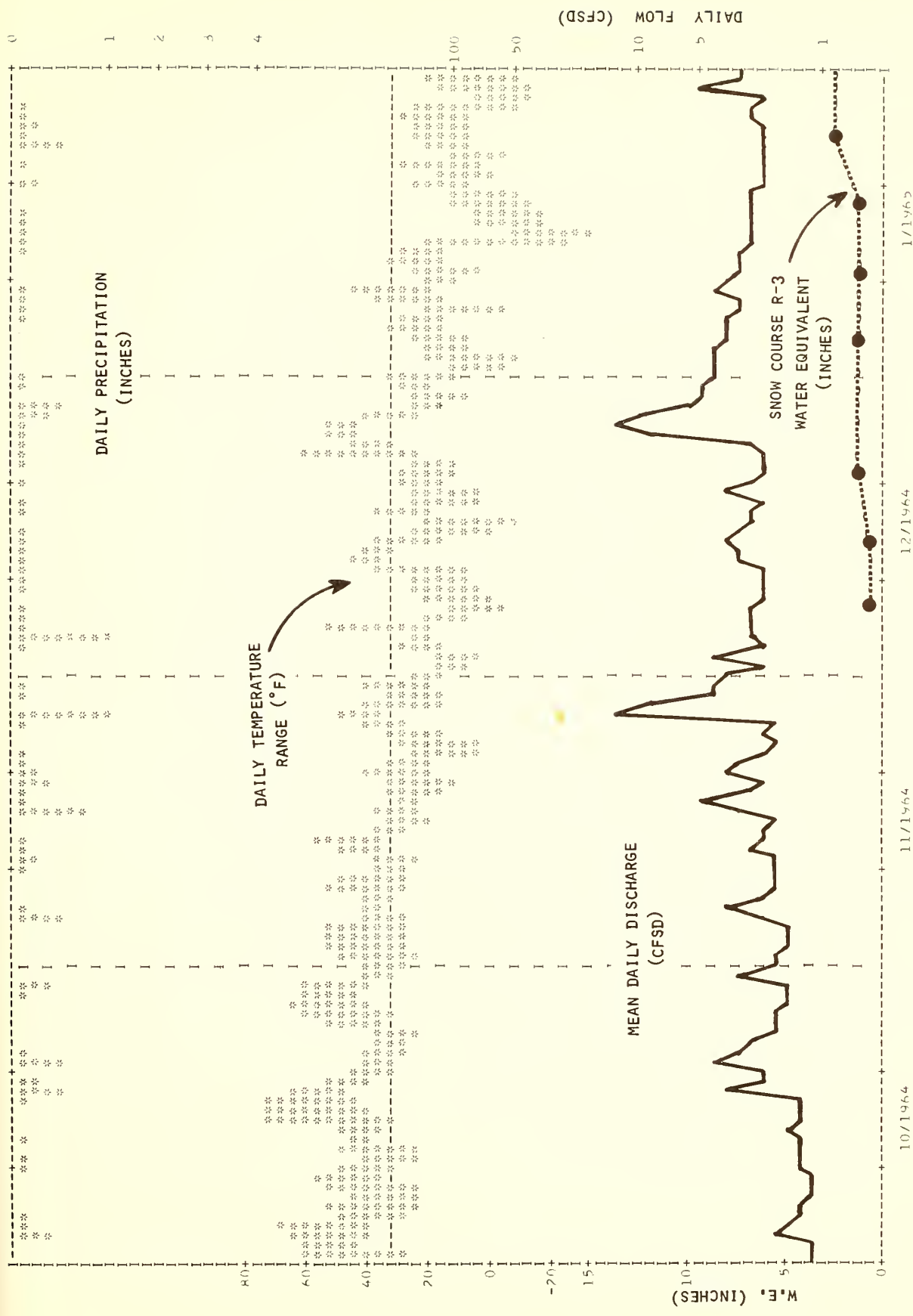


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- FEB 1964 - MAY 1964

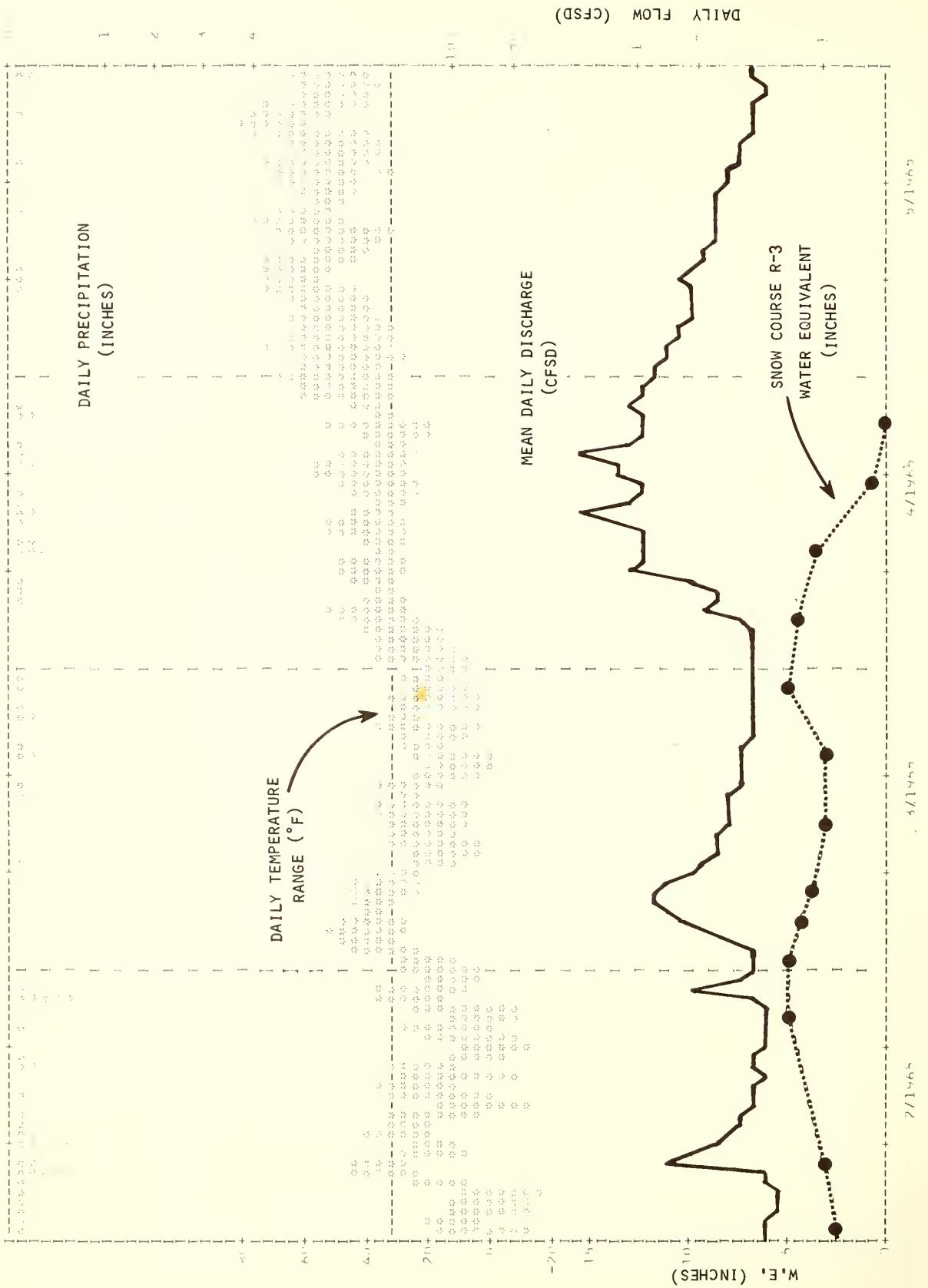


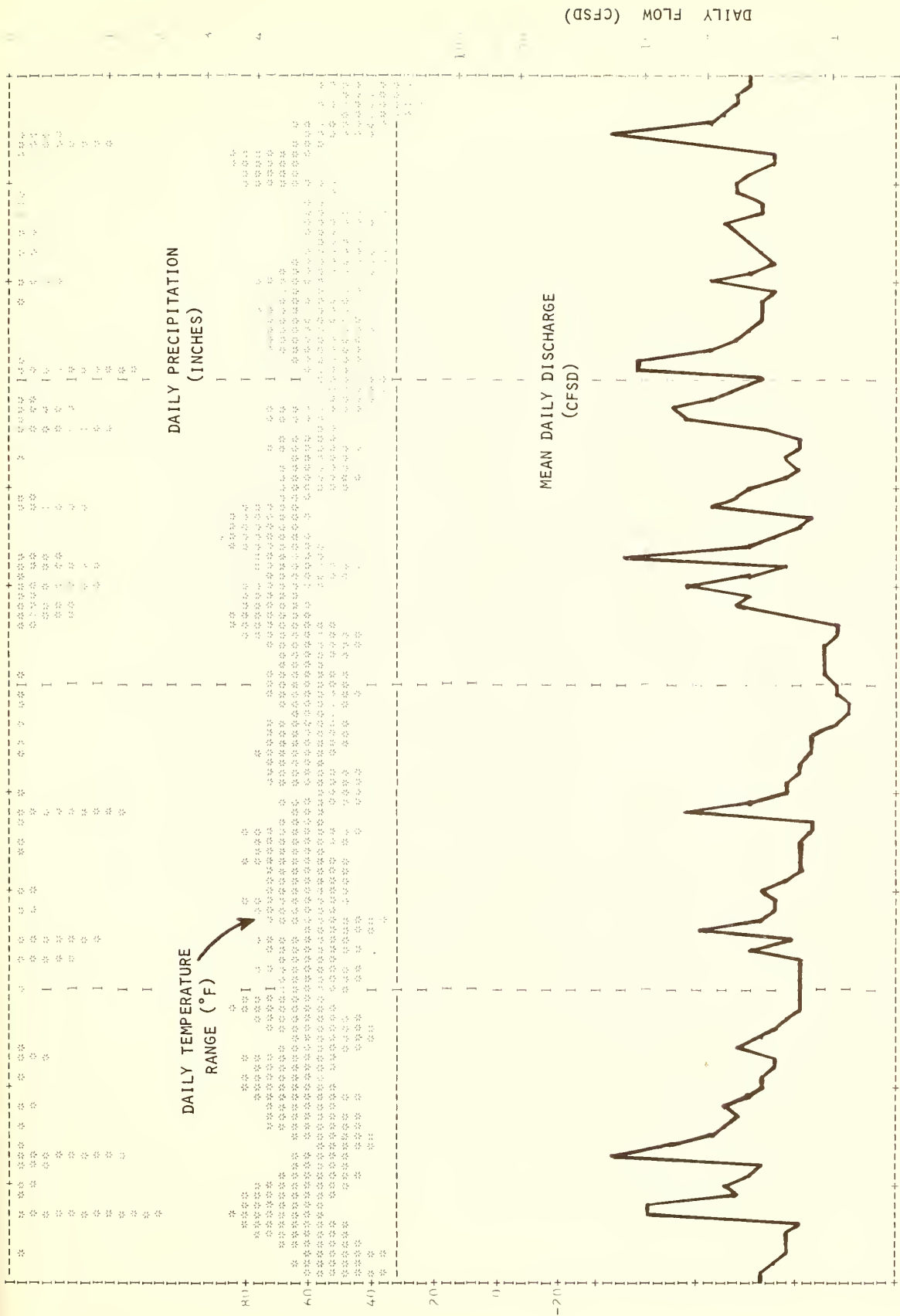


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- JUN 1964 - SEP 1964



SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT --- OCT 1964 - JAN 1965





6/1965

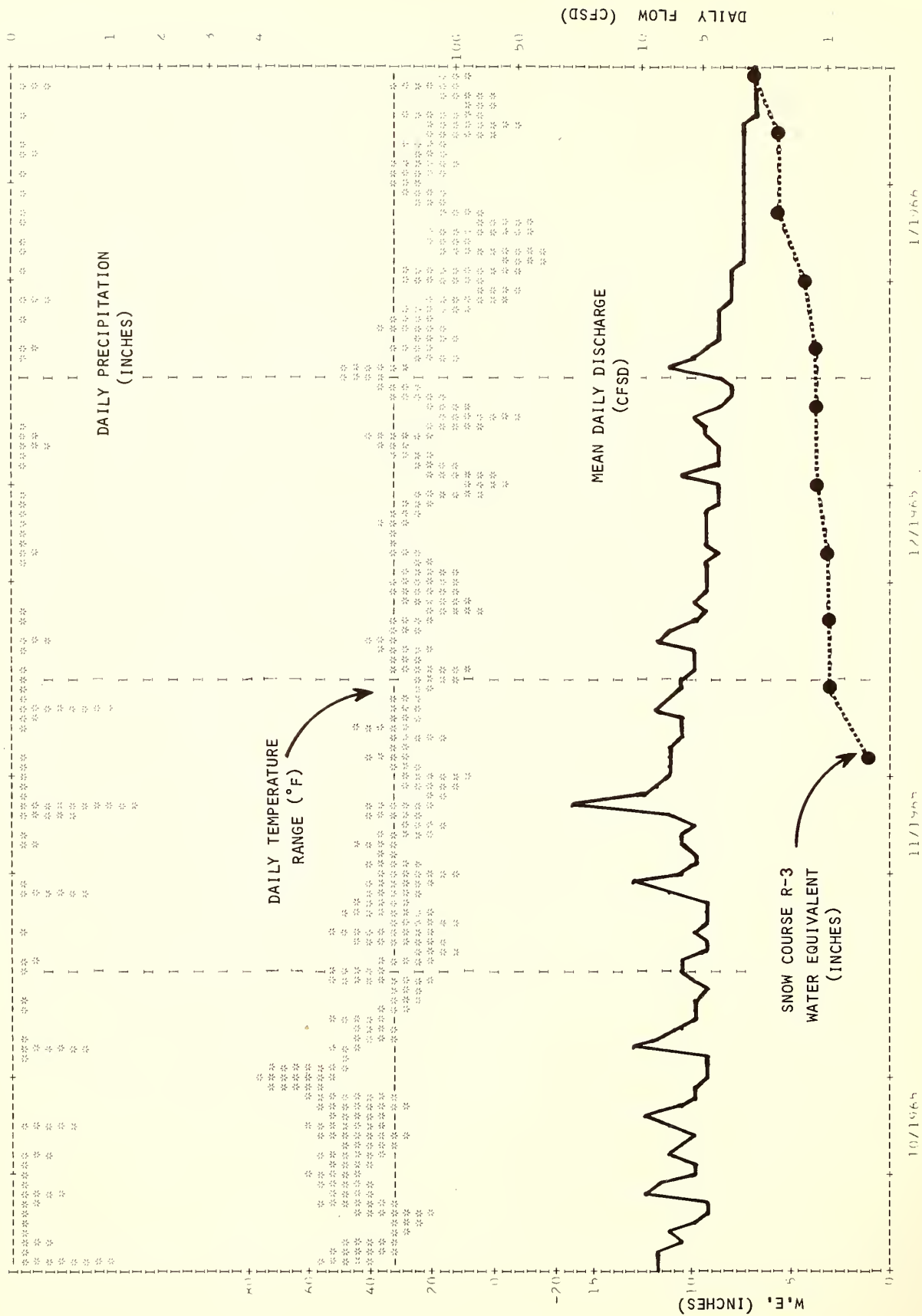
7/1965

8/1965

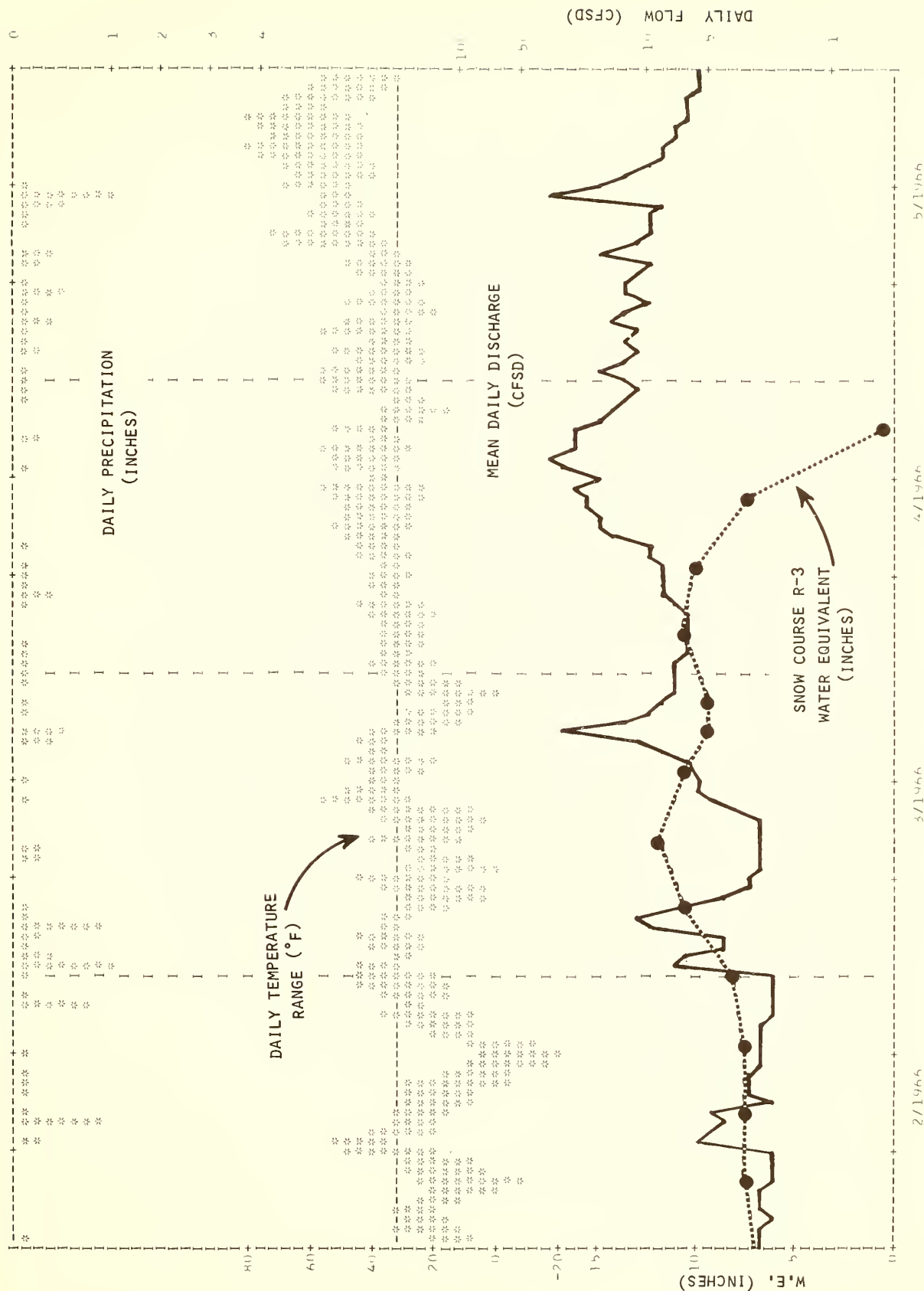
9/1965

SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- JUN 1965 - SEP 1965

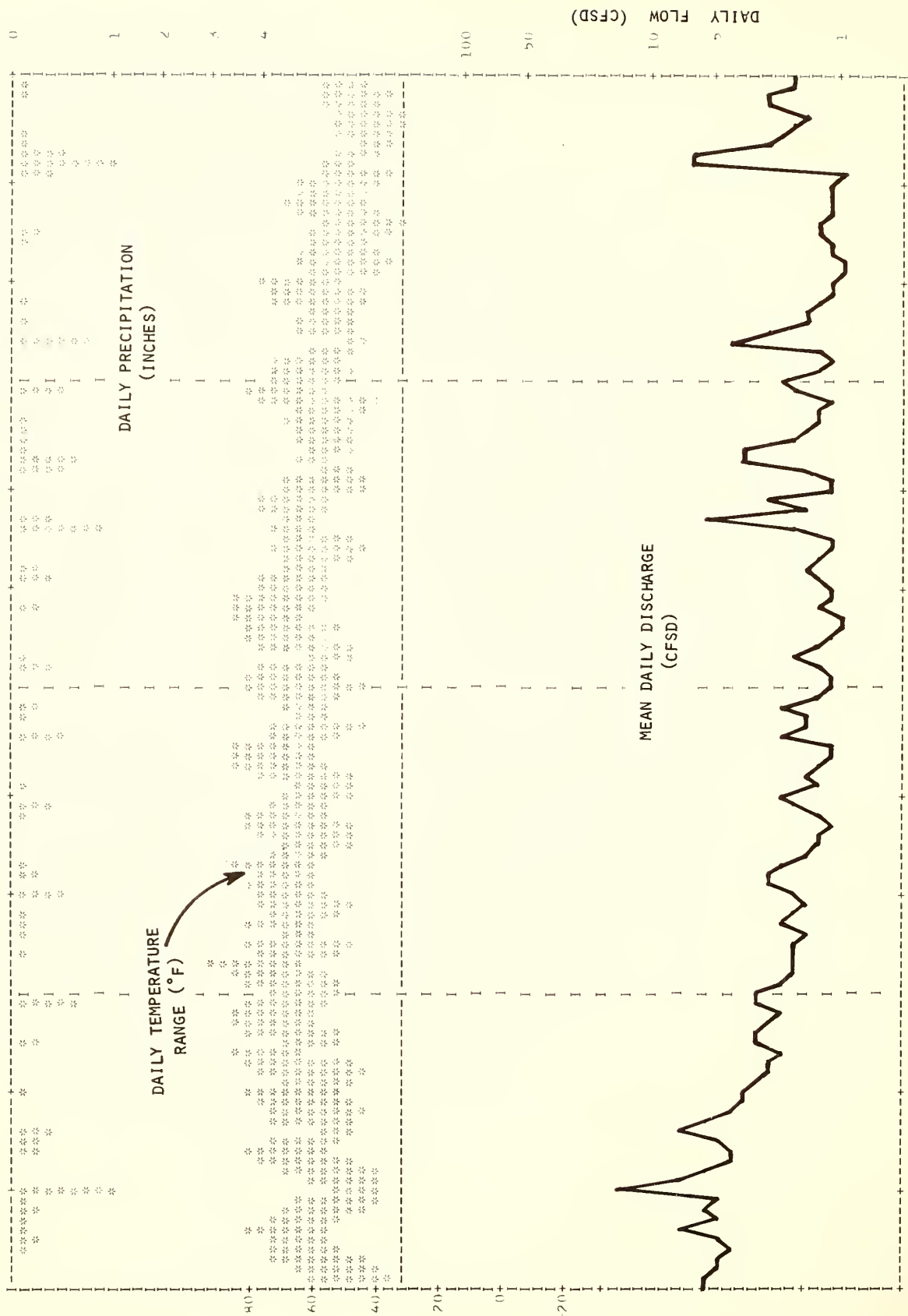




SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- OCT 1965 - JAN 1966

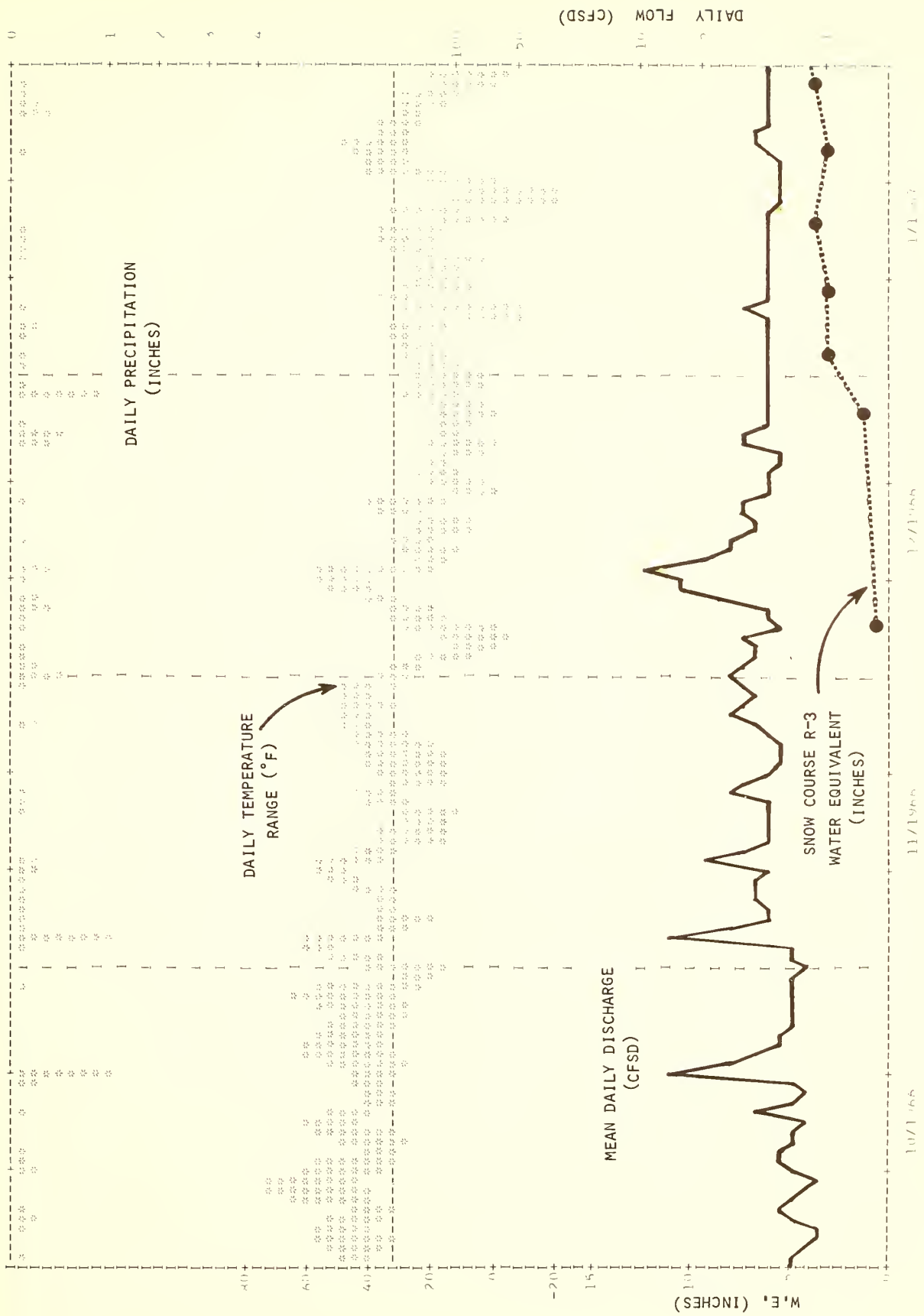


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- FEB 1966 - MAY 1966



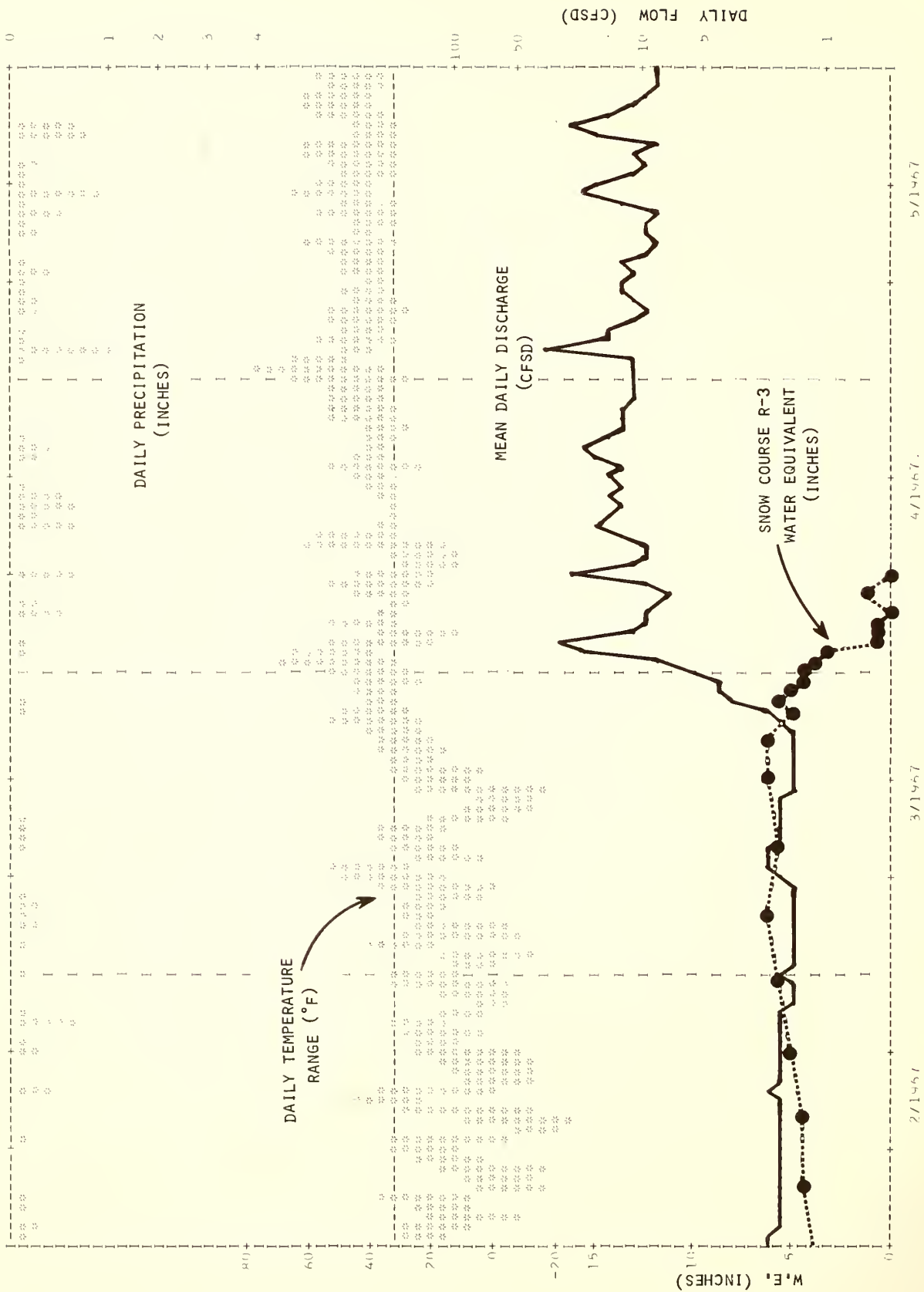
6/1/1966 7/1/1966 8/1/1966 9/1/1966

SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- JUN 1966 - SEP 1966

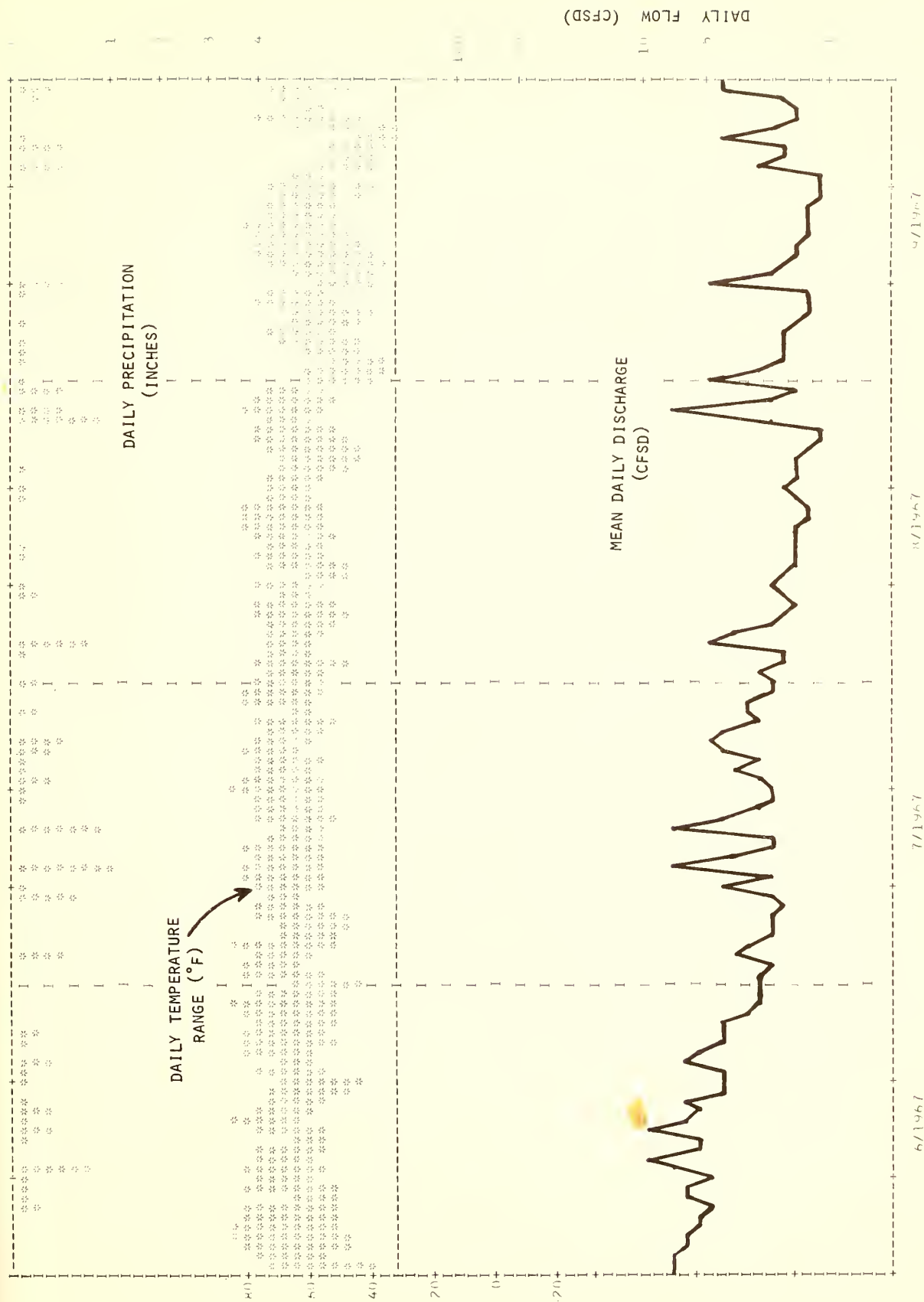


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- OCT 1966 -- JAN 1967

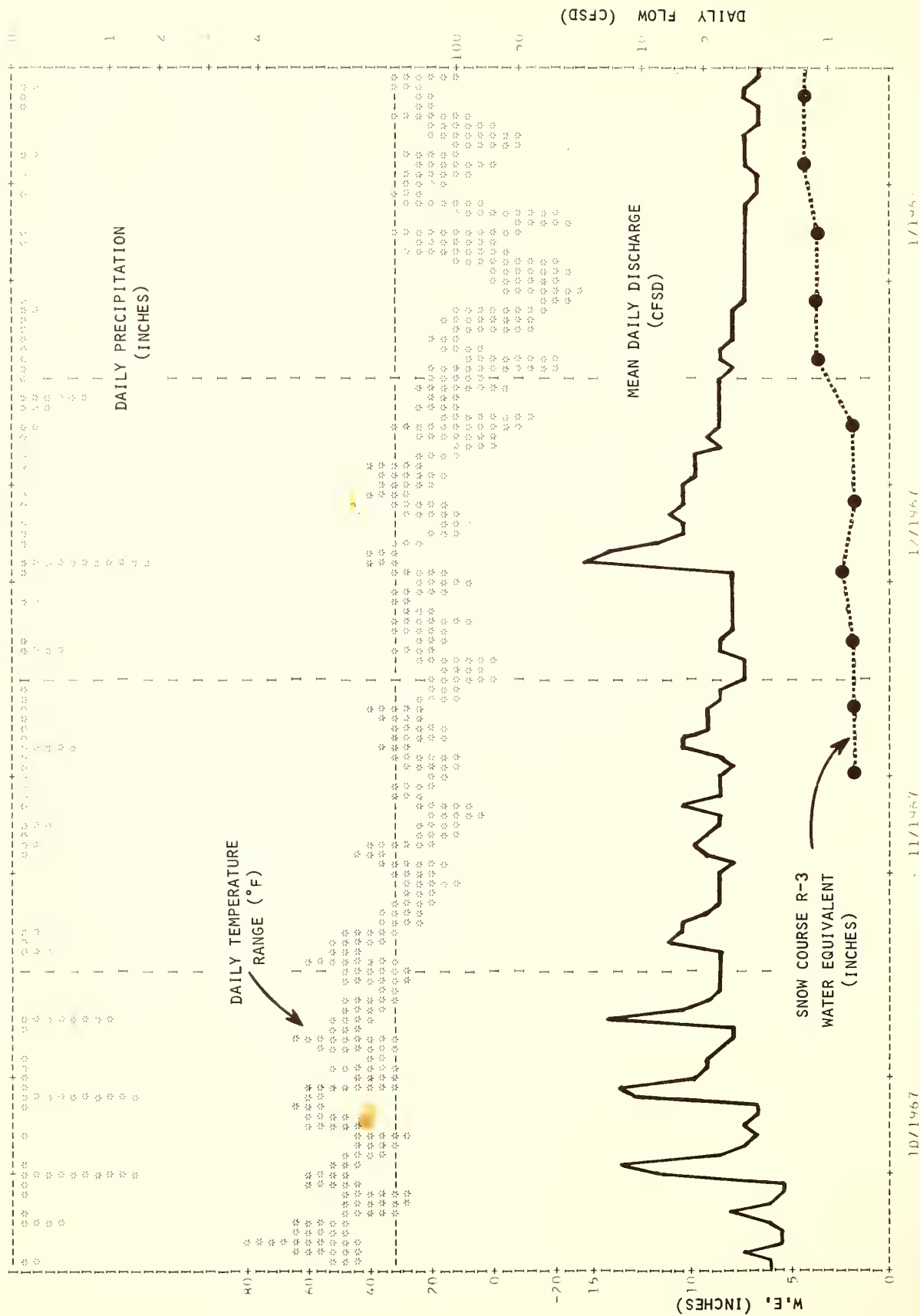




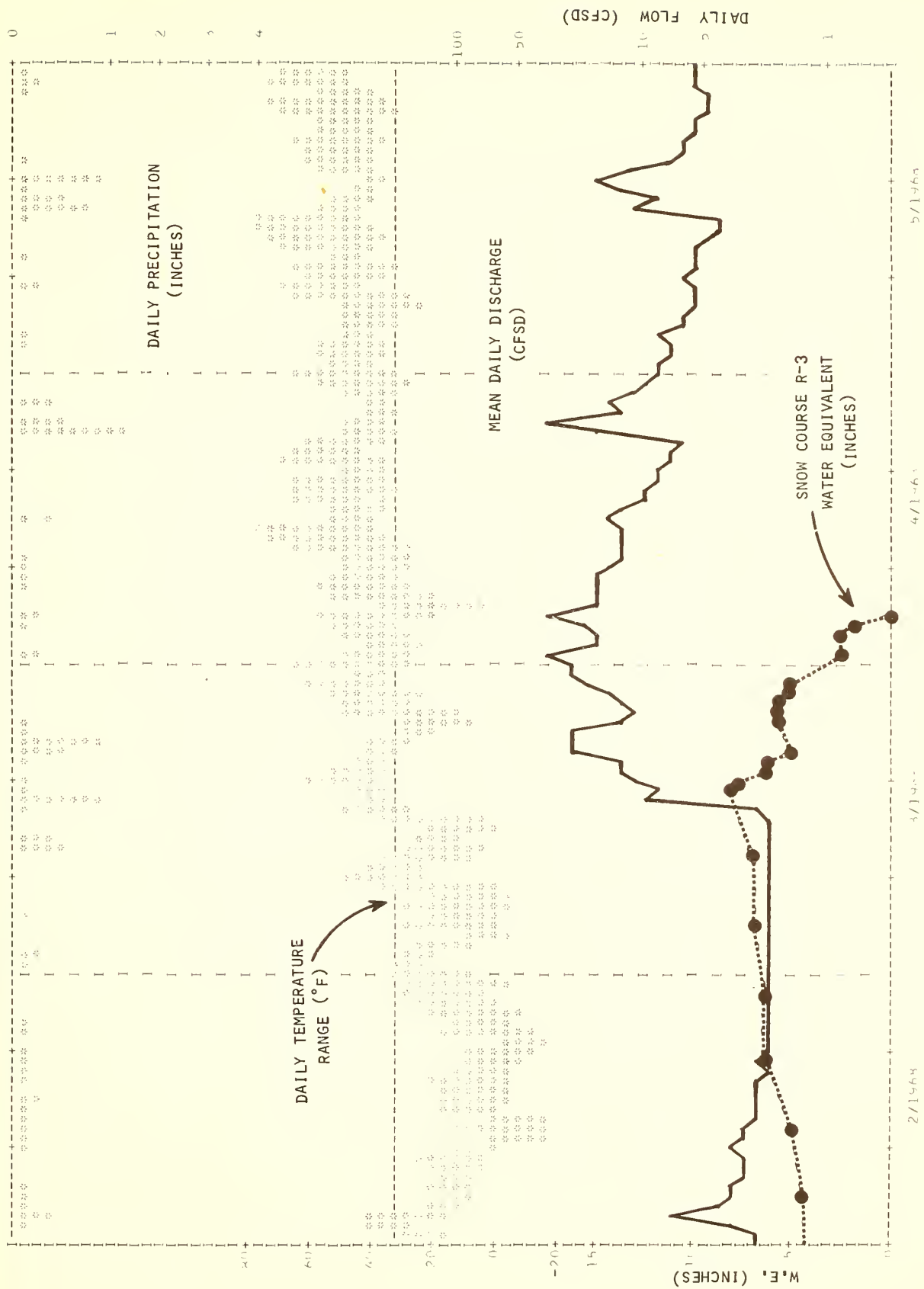
SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- FEB 1967 -- MAY 1967



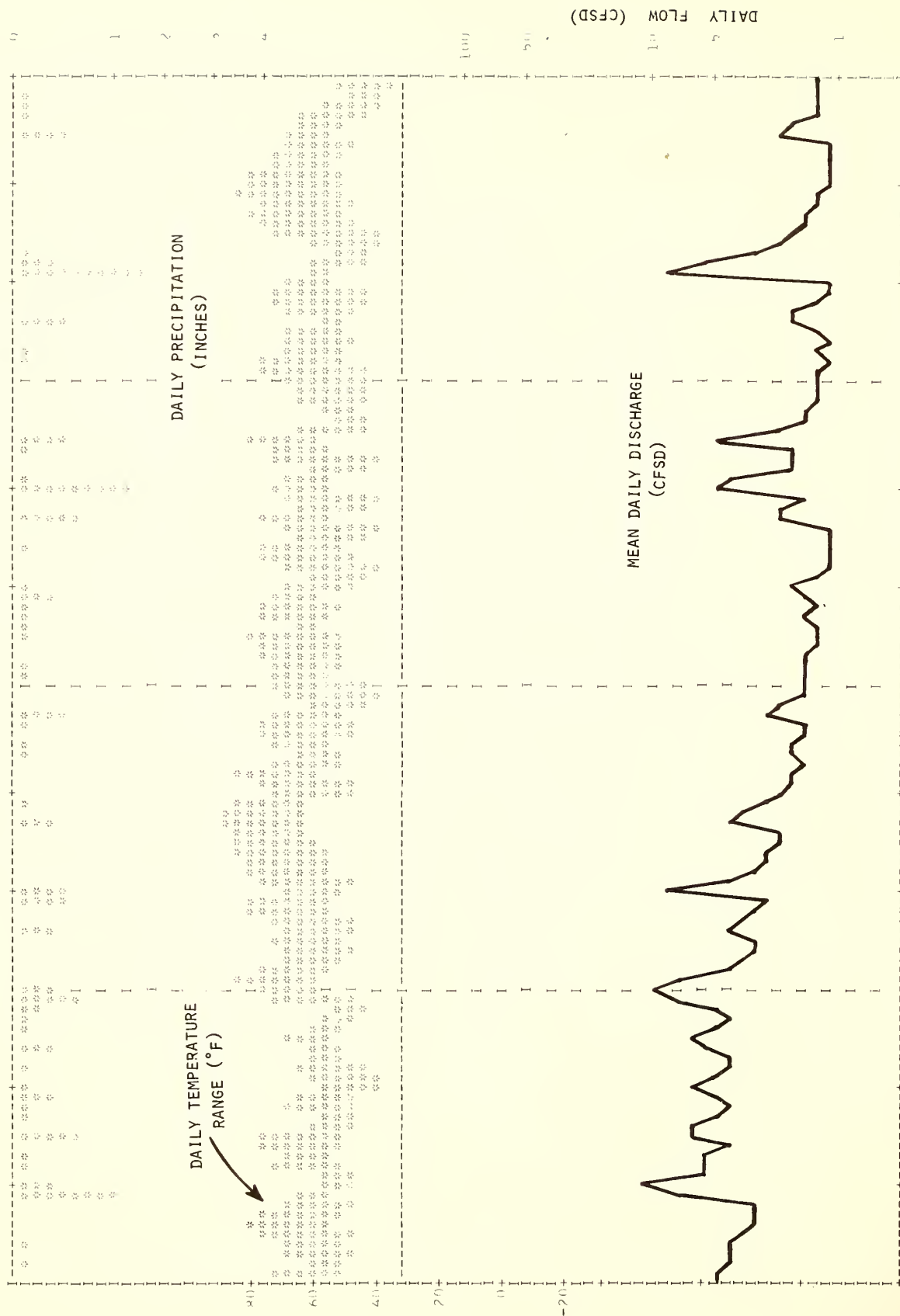
SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT --- JUN 1967 - SEP 1967



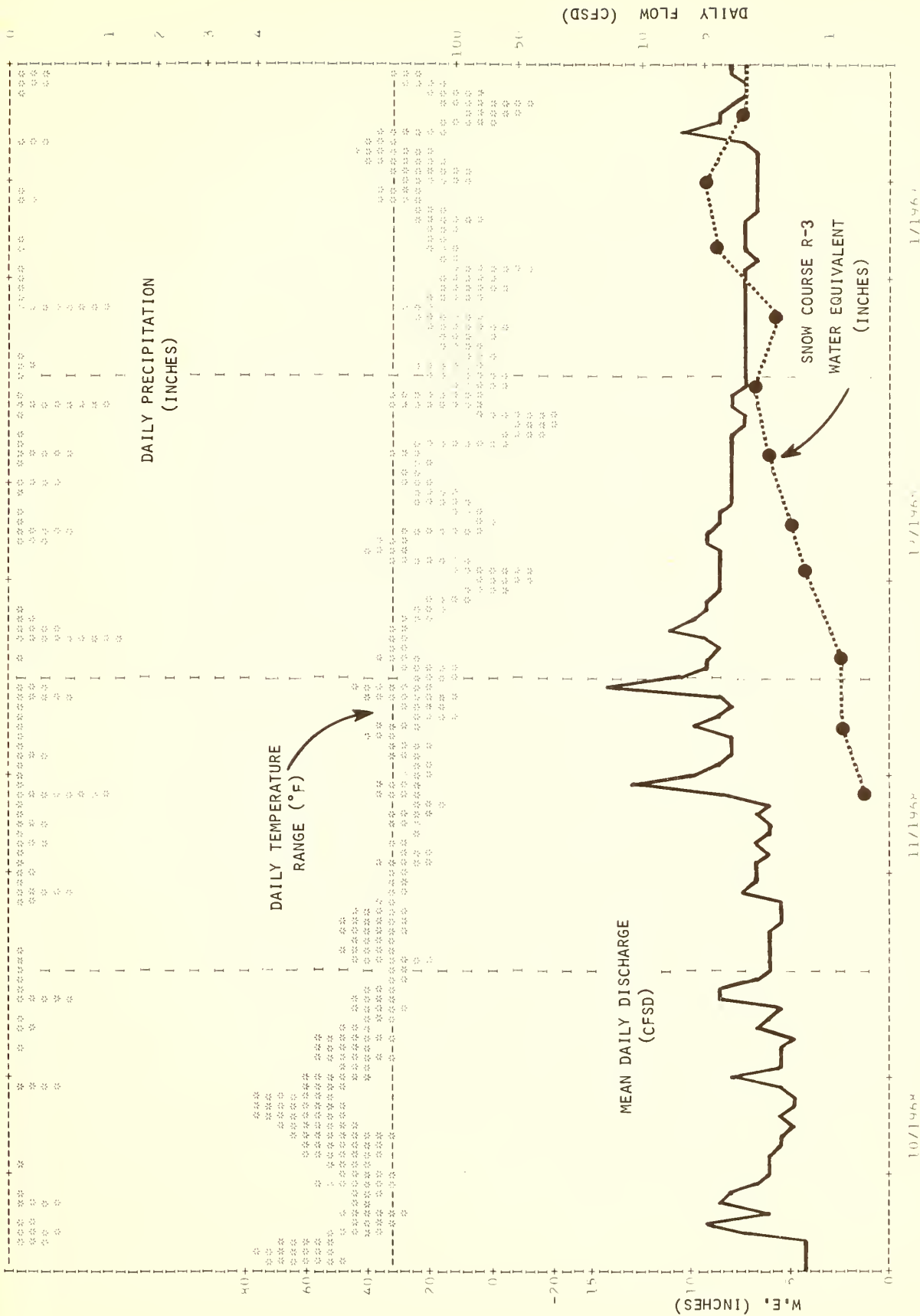
SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- Oct 1967 - Jan 1968



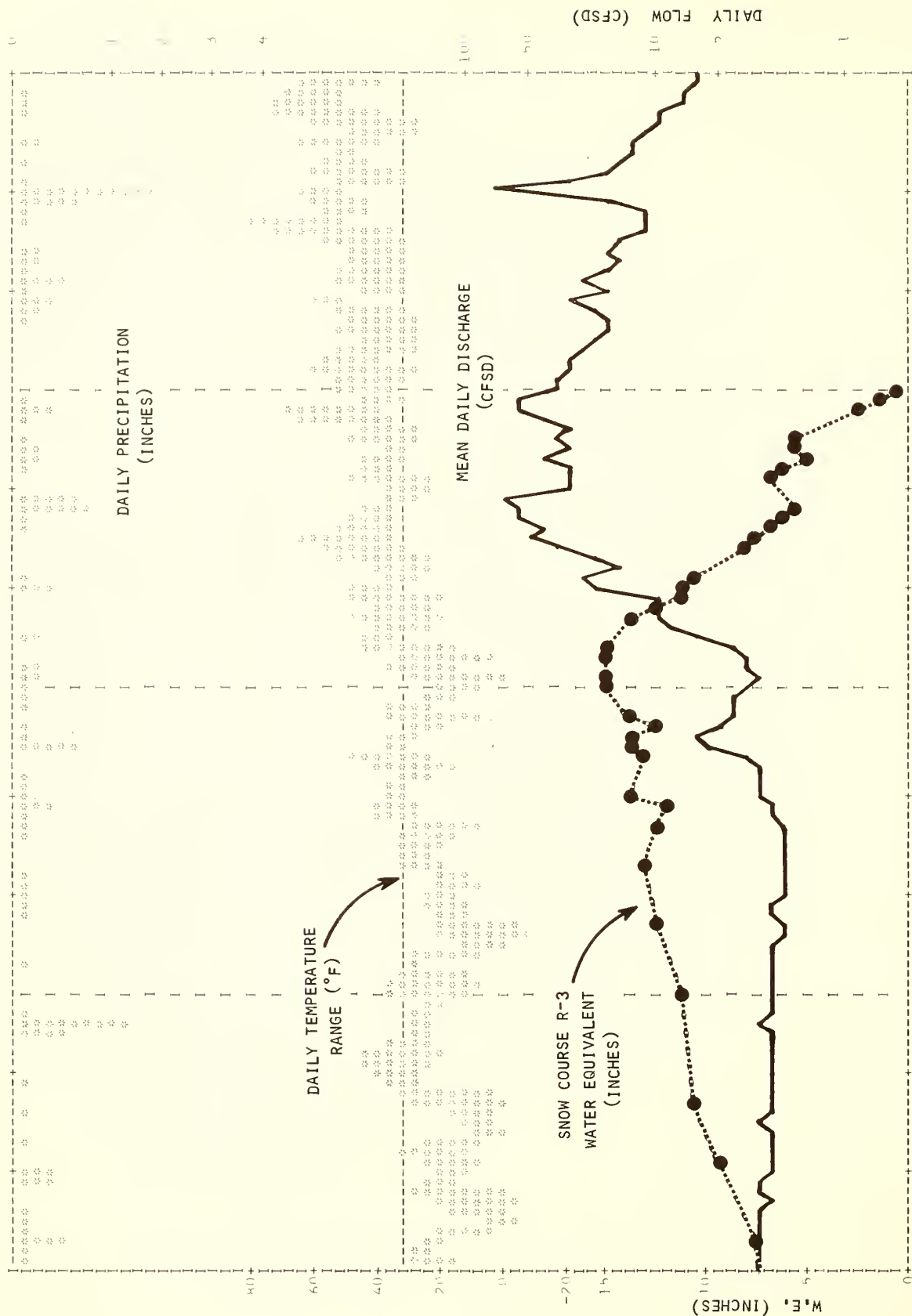
SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- FEB 1968 -- MAY 1968





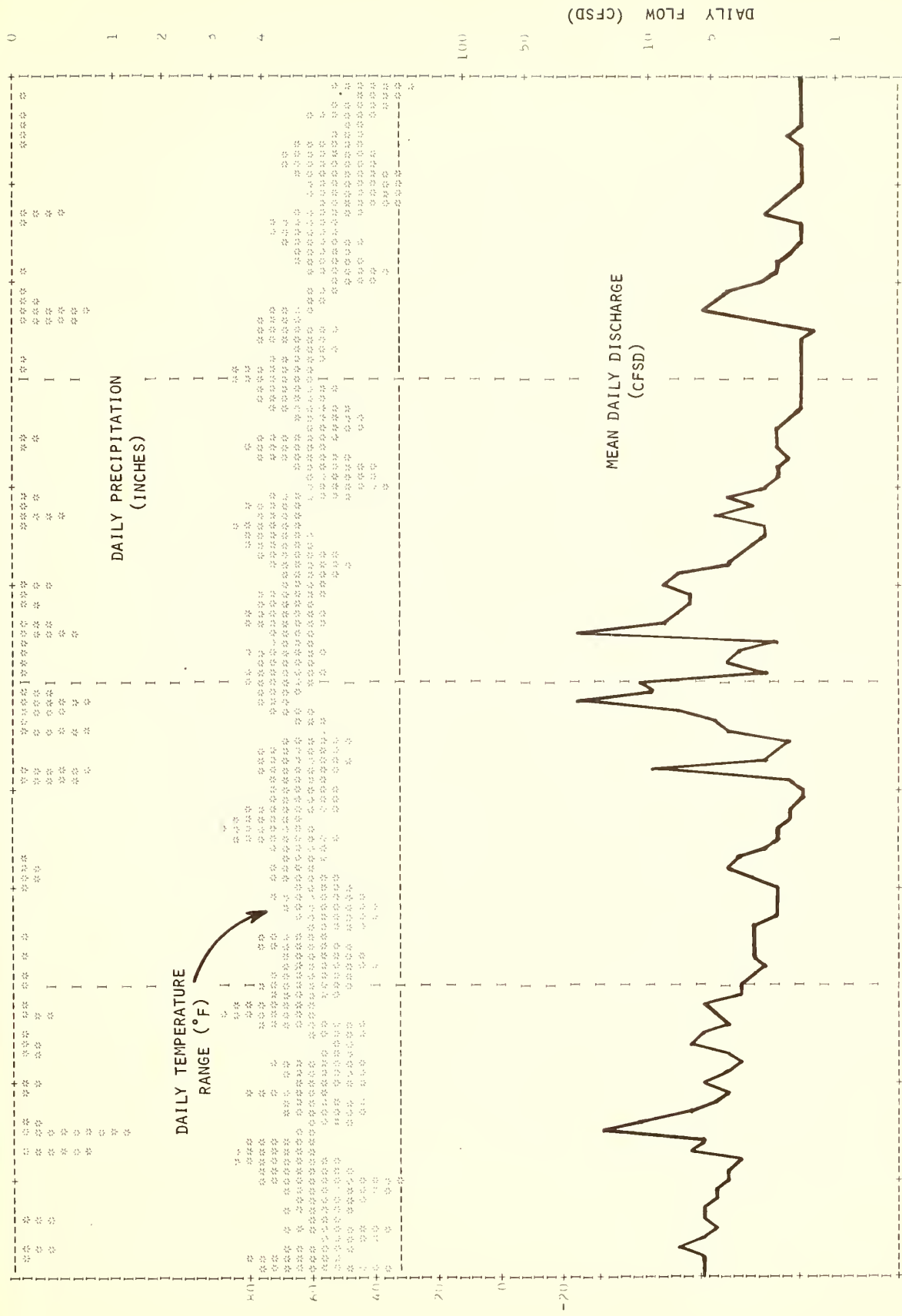


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- OCT 1968 - JAN 1969



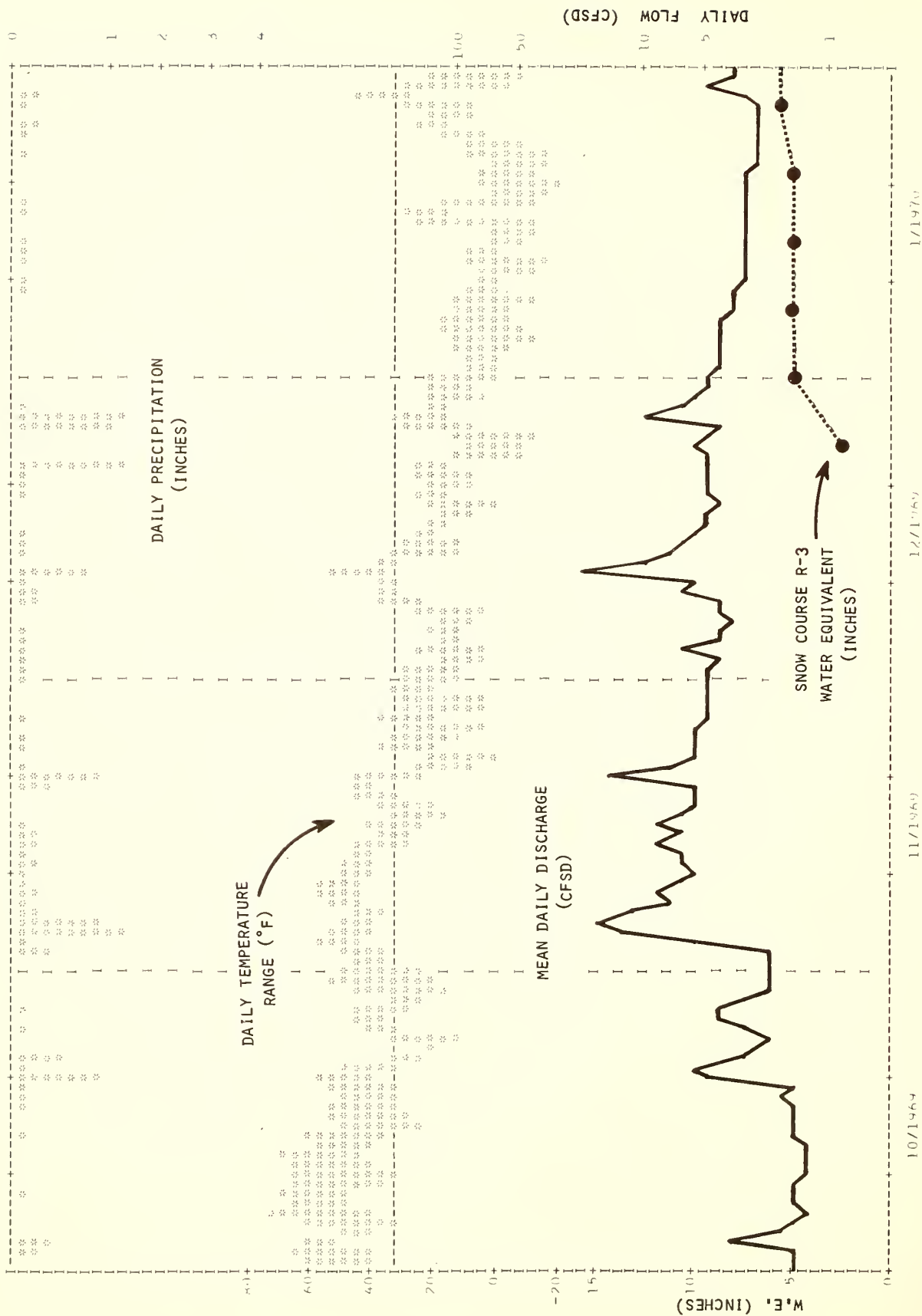
2/1969 3/1969 4/1969 5/1969

SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT --- FEB 1969 - MAY 1969

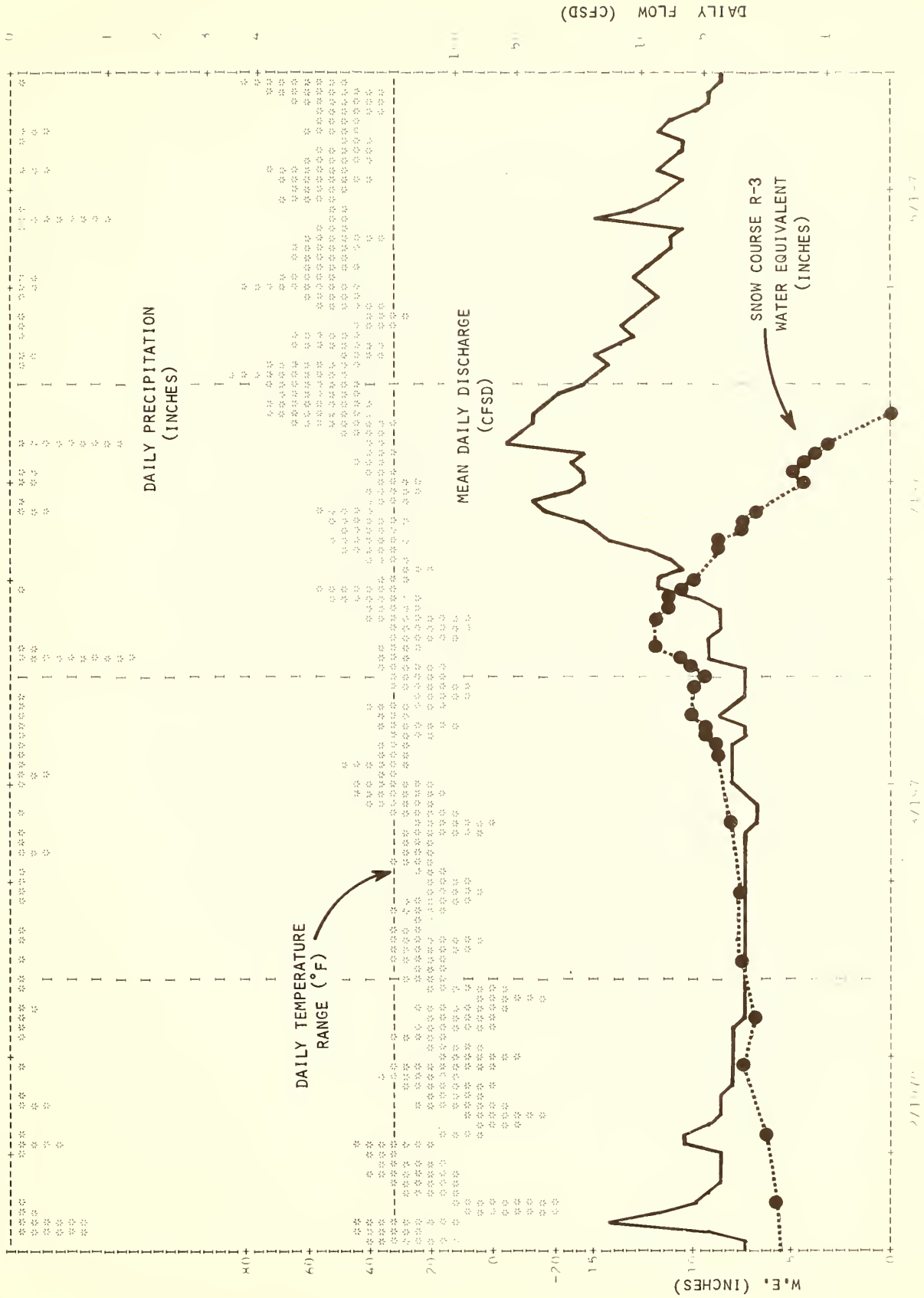


6/1-69 7/1-69 8/1-69

SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- JUN 1969 - SEP 1969

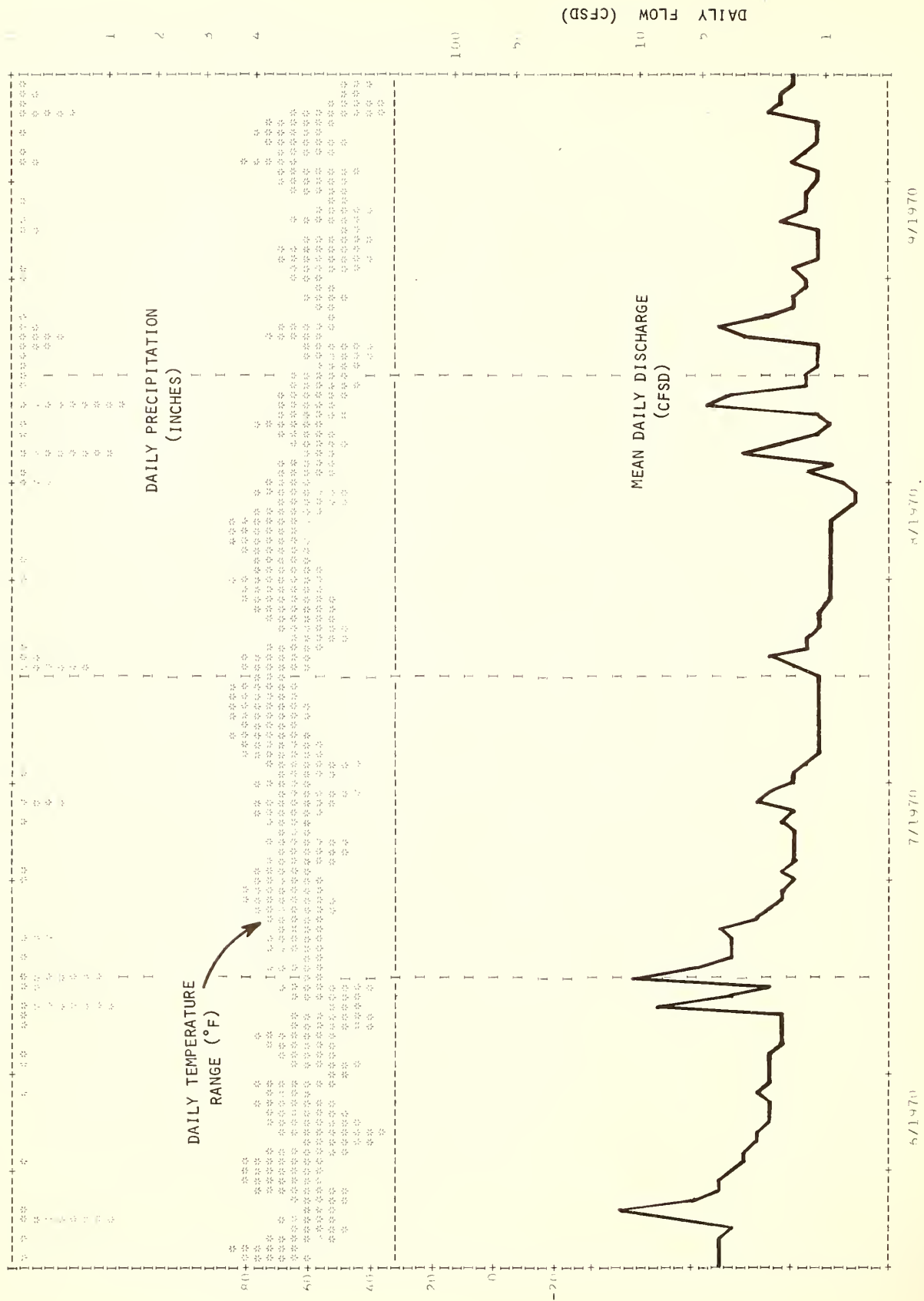


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- Oct 1969 - Jan 1970

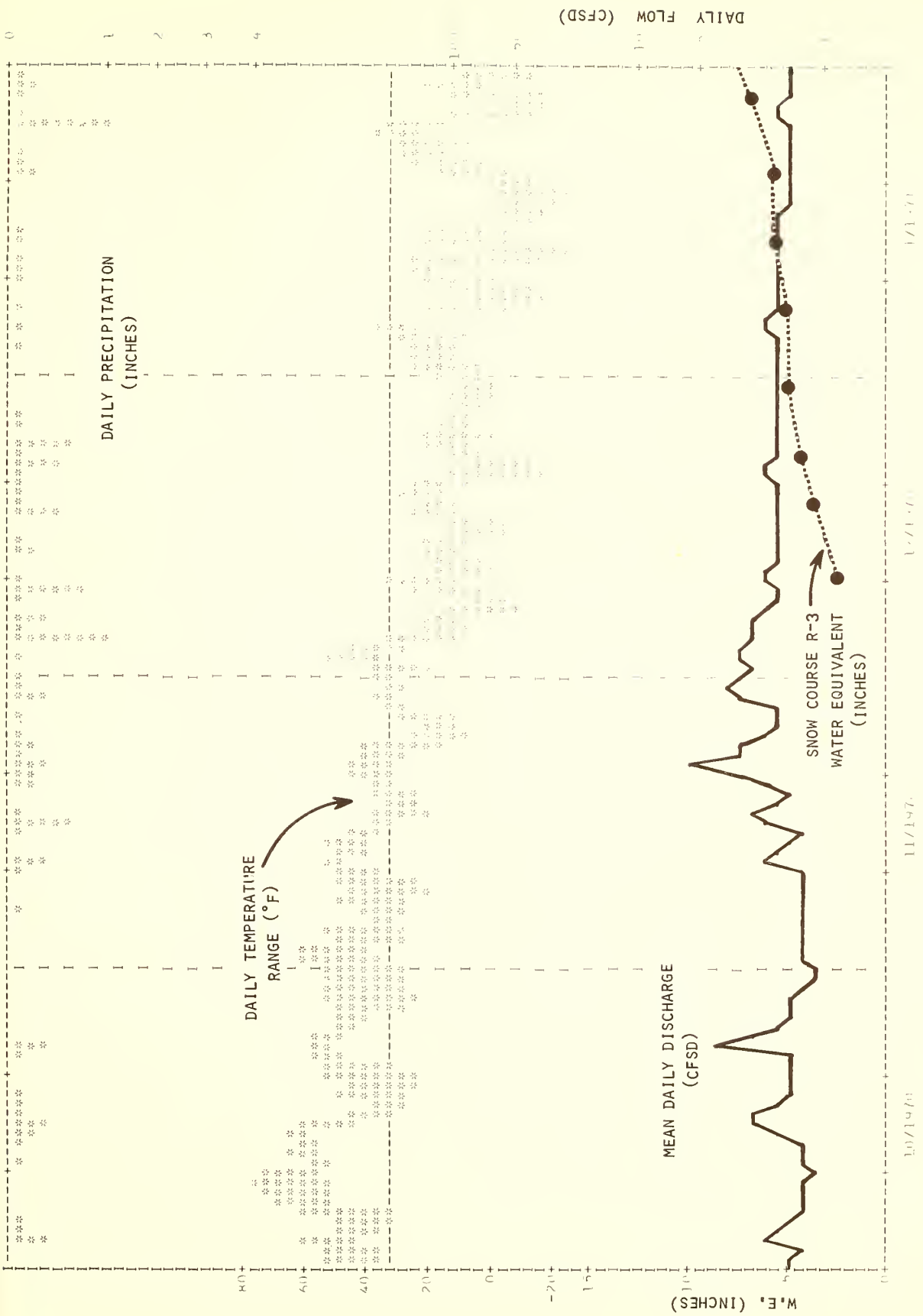


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- FEB 1970 -- MAY 1970

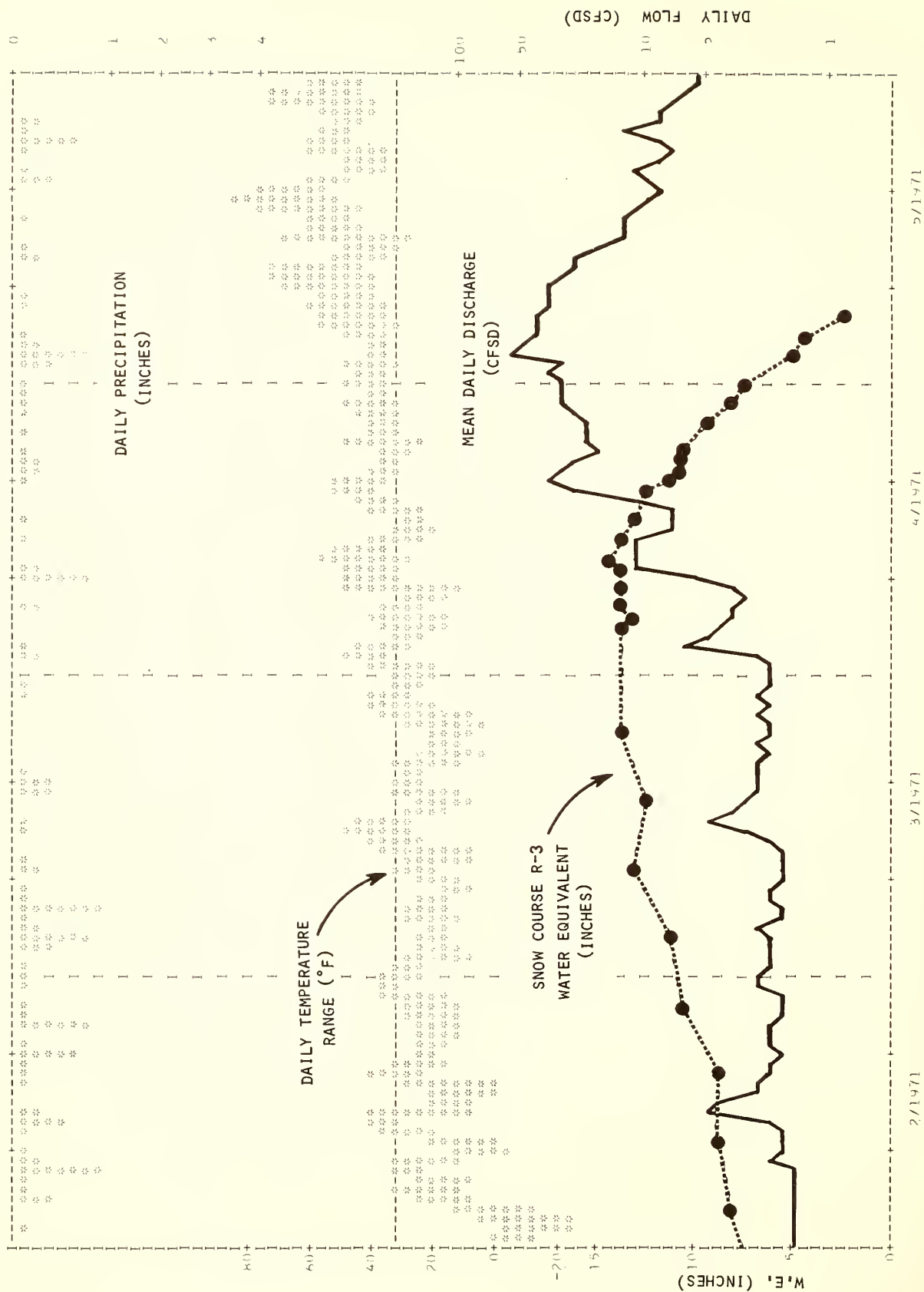




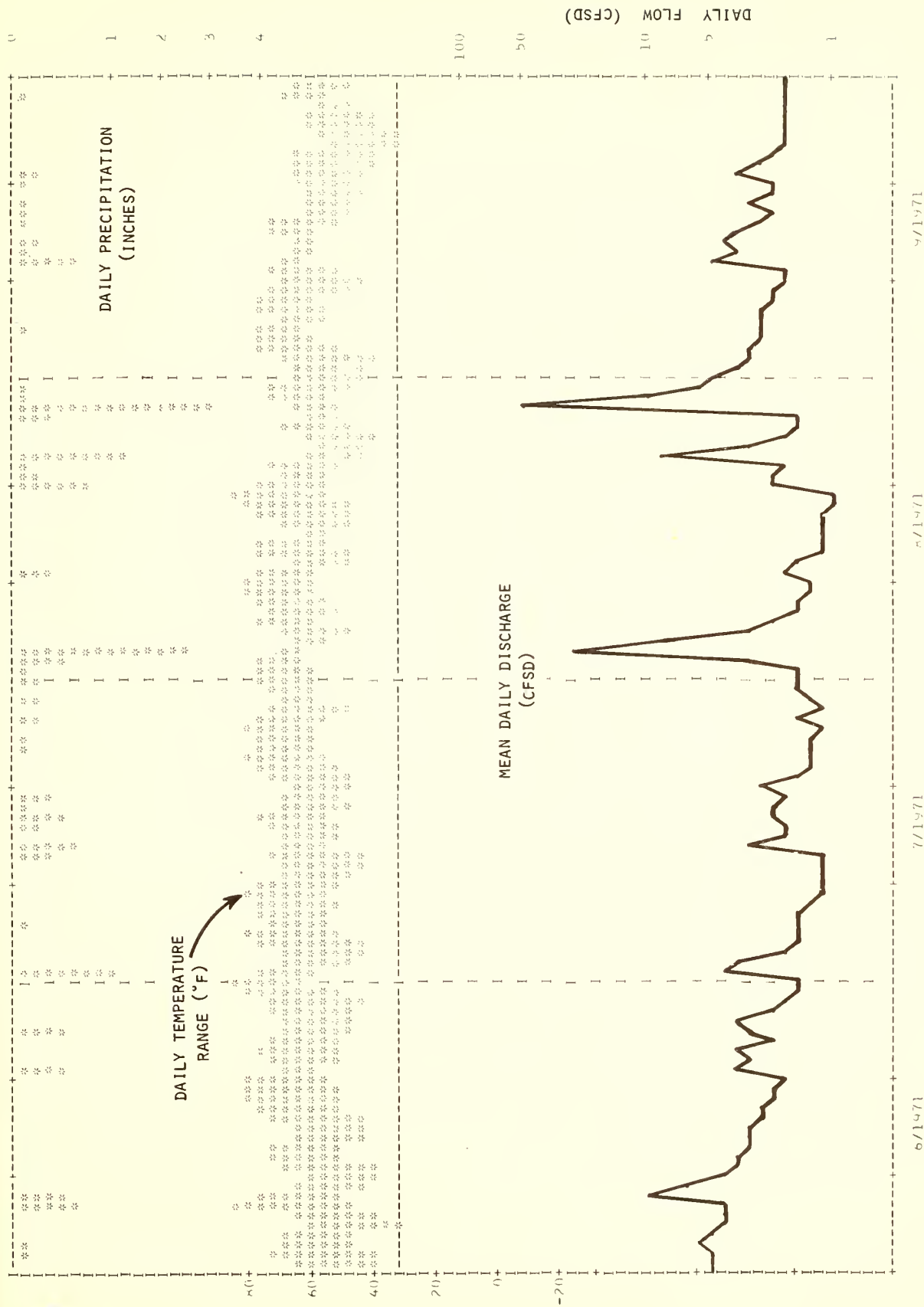
SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- JUN 1970 -- SEP 1970



SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- OCT 1970 - JAN 1971



SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT --- FEB 1971 -- MAY 1971



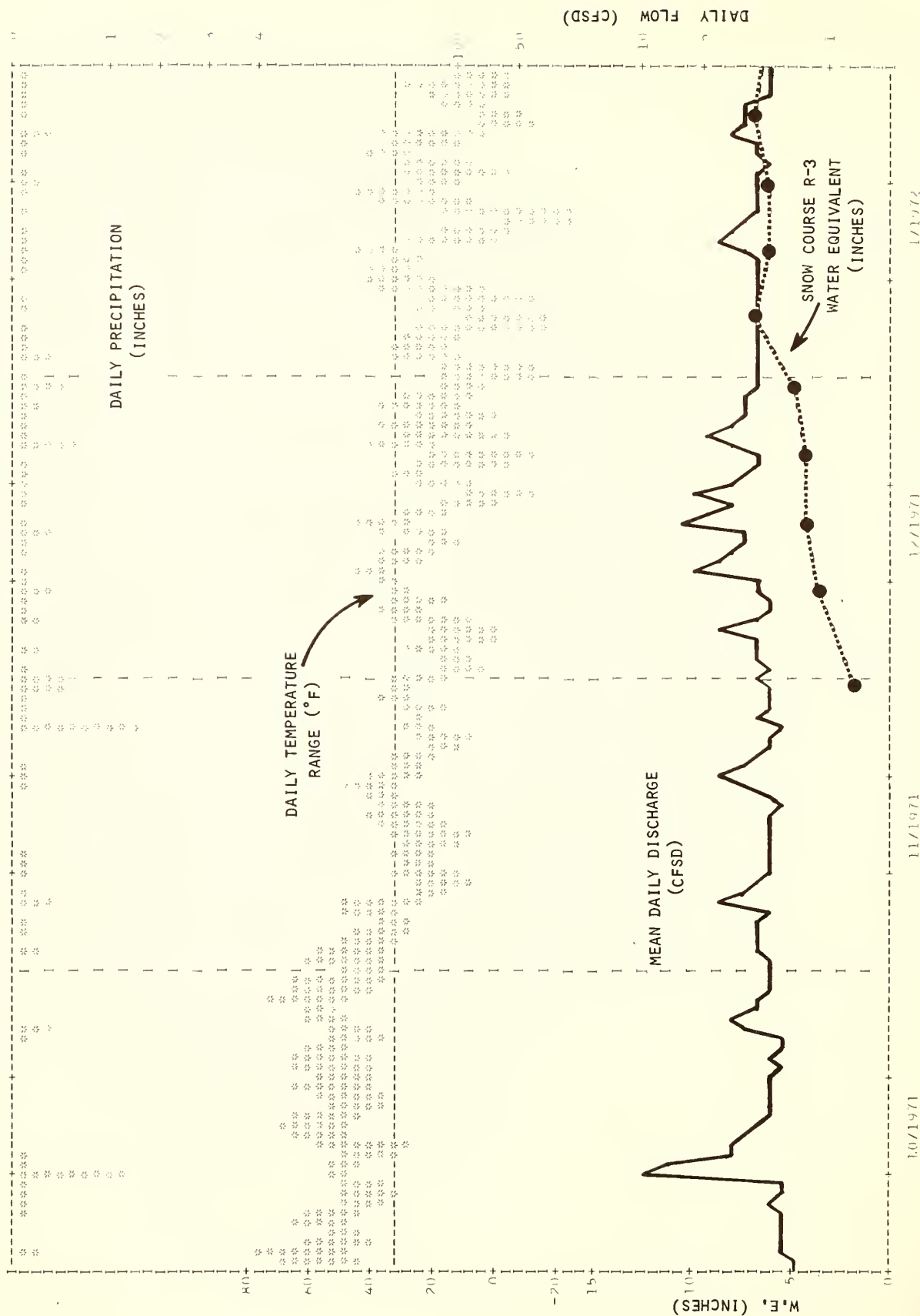
6/1971

7/1971

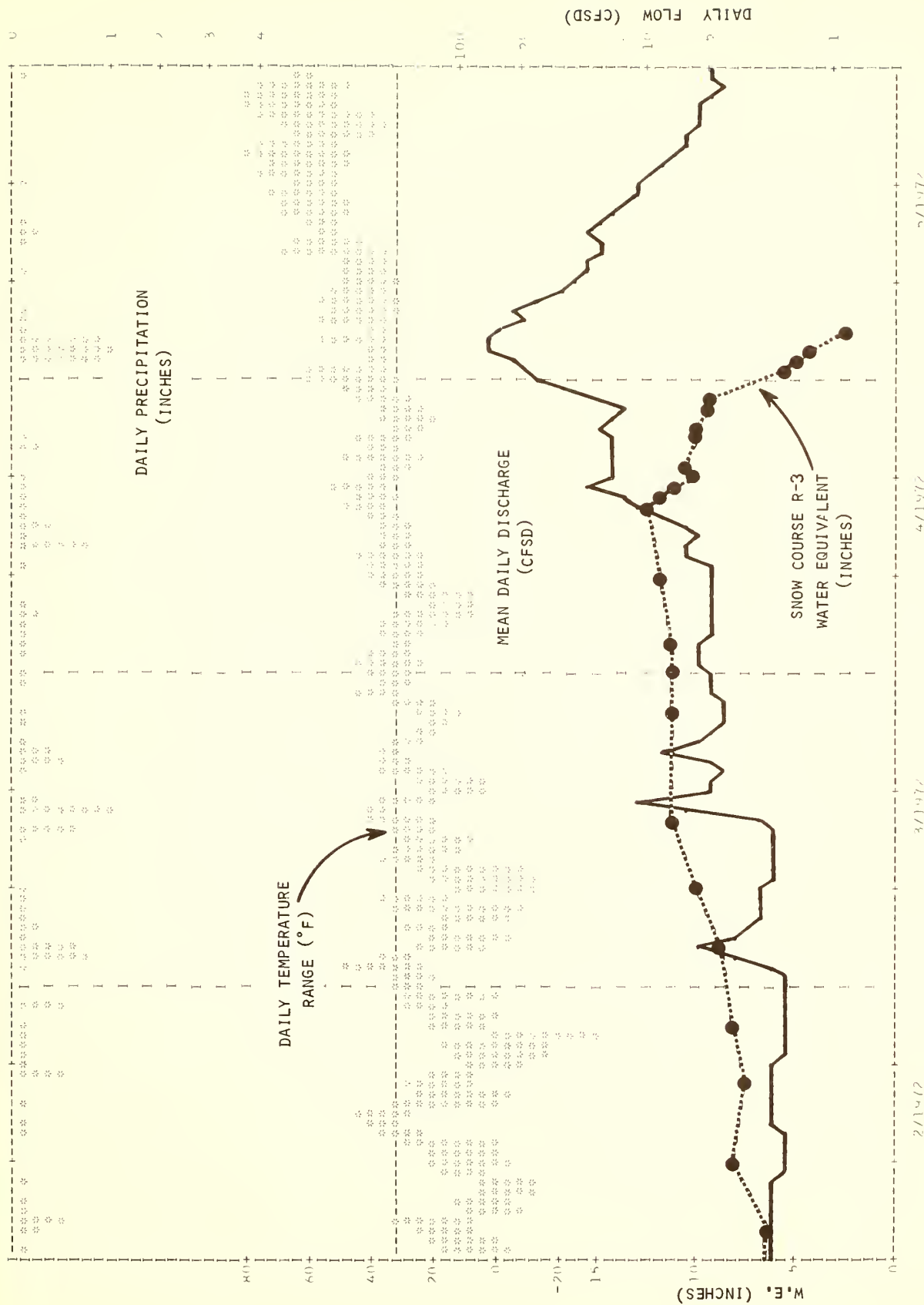
8/1971

9/1971

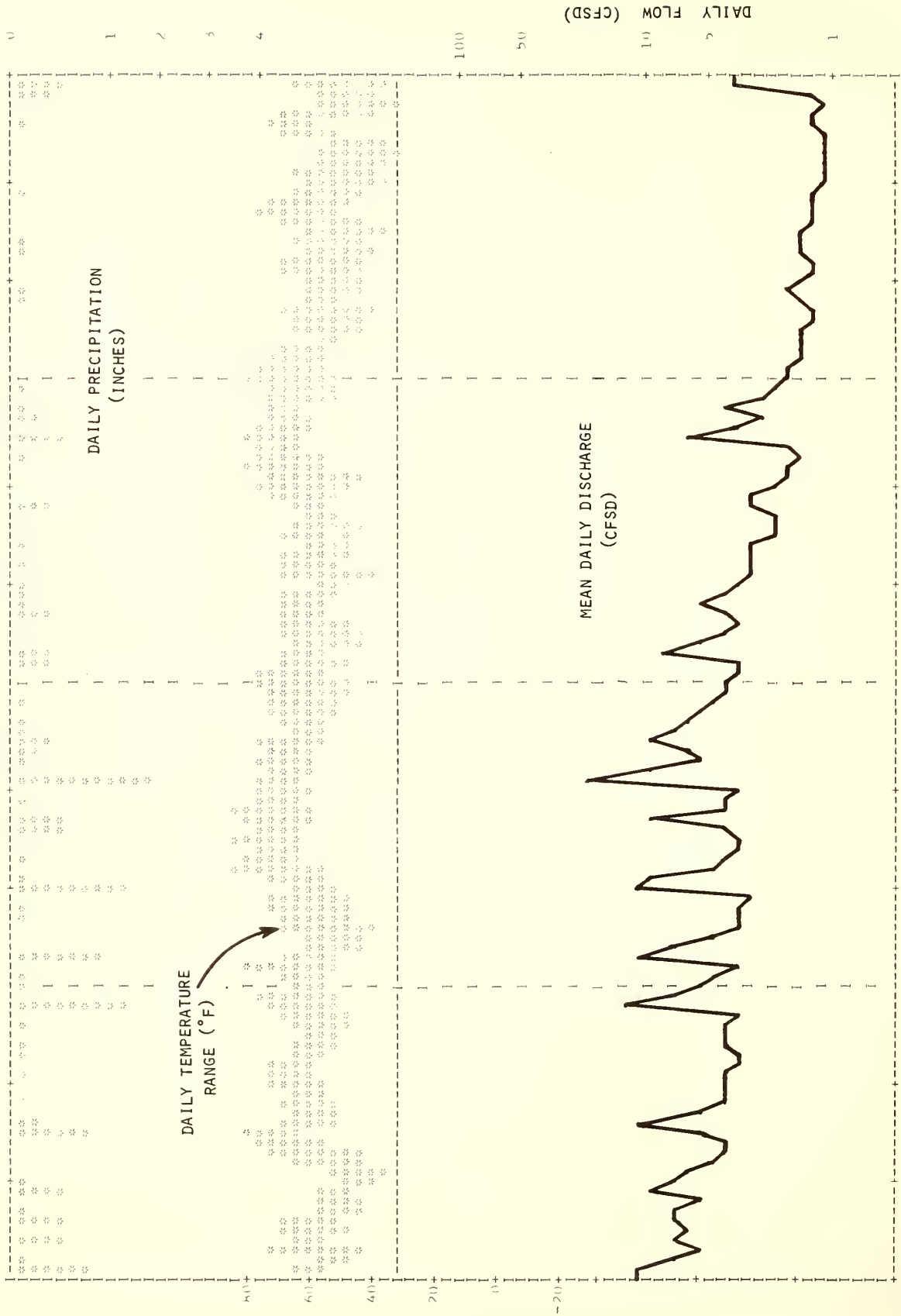
SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- JUN 1971 - SEP 1971

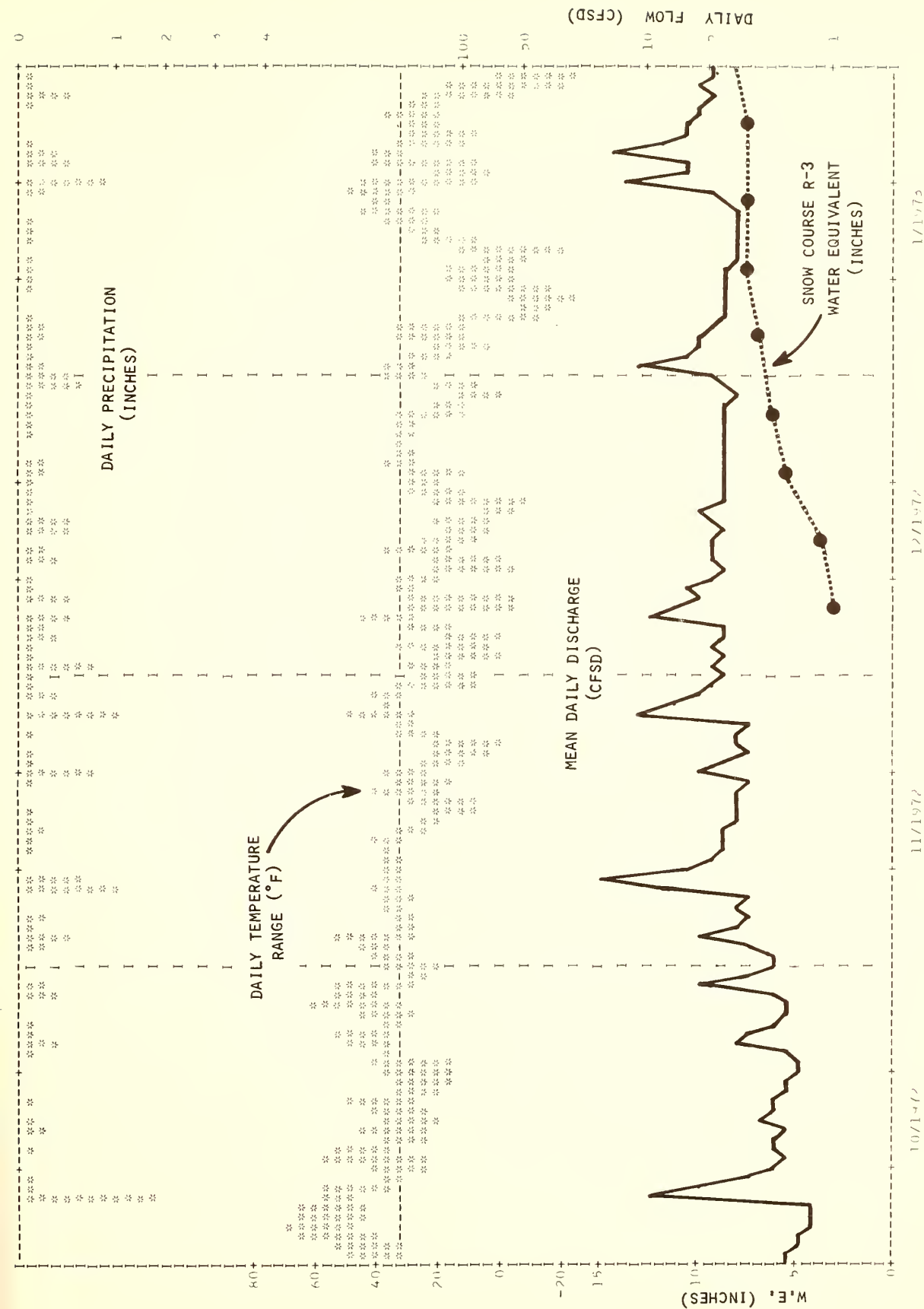




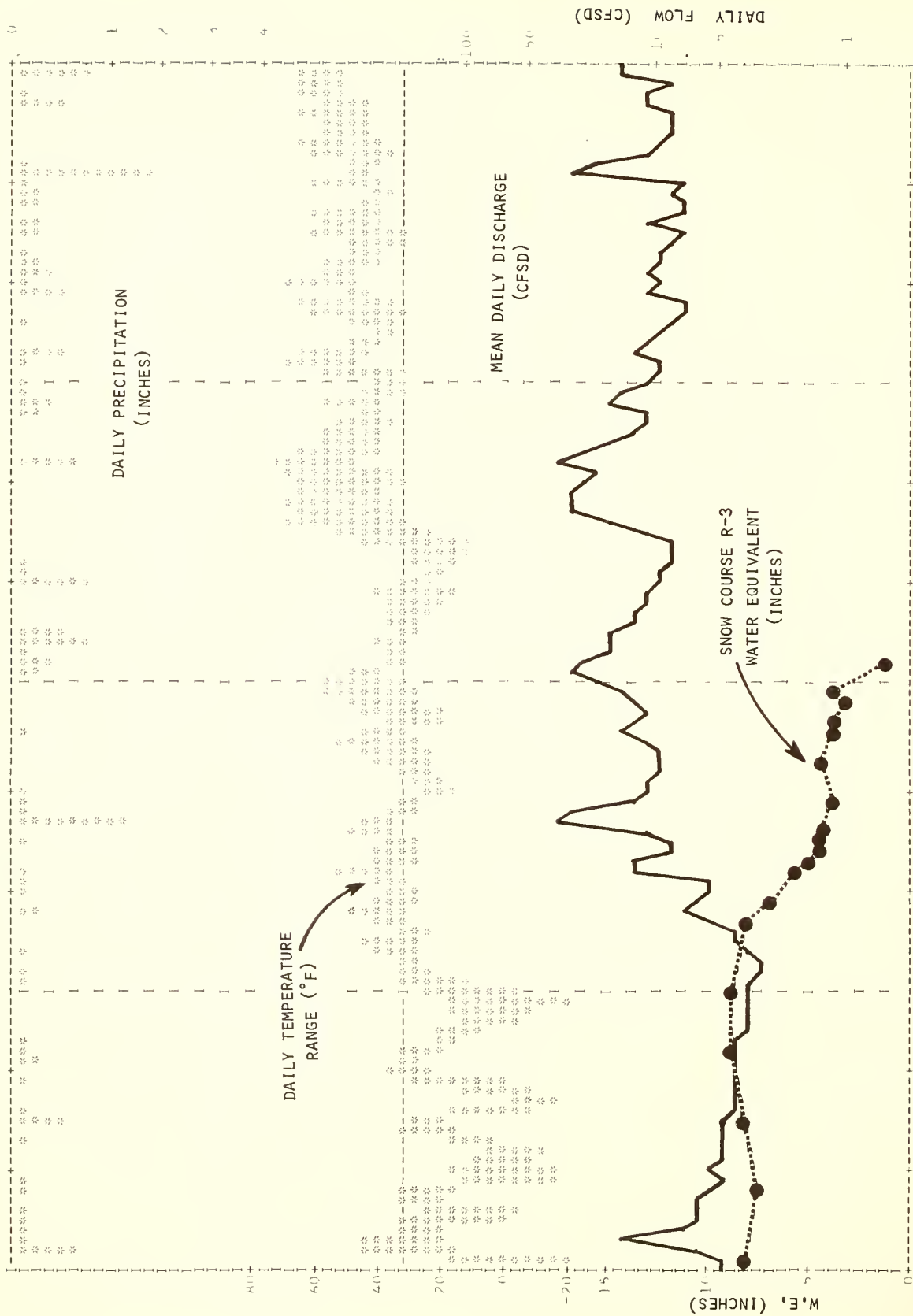


SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- FEB 1972 -- MAY 1972





SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- Oct 1972 - Jan 1973



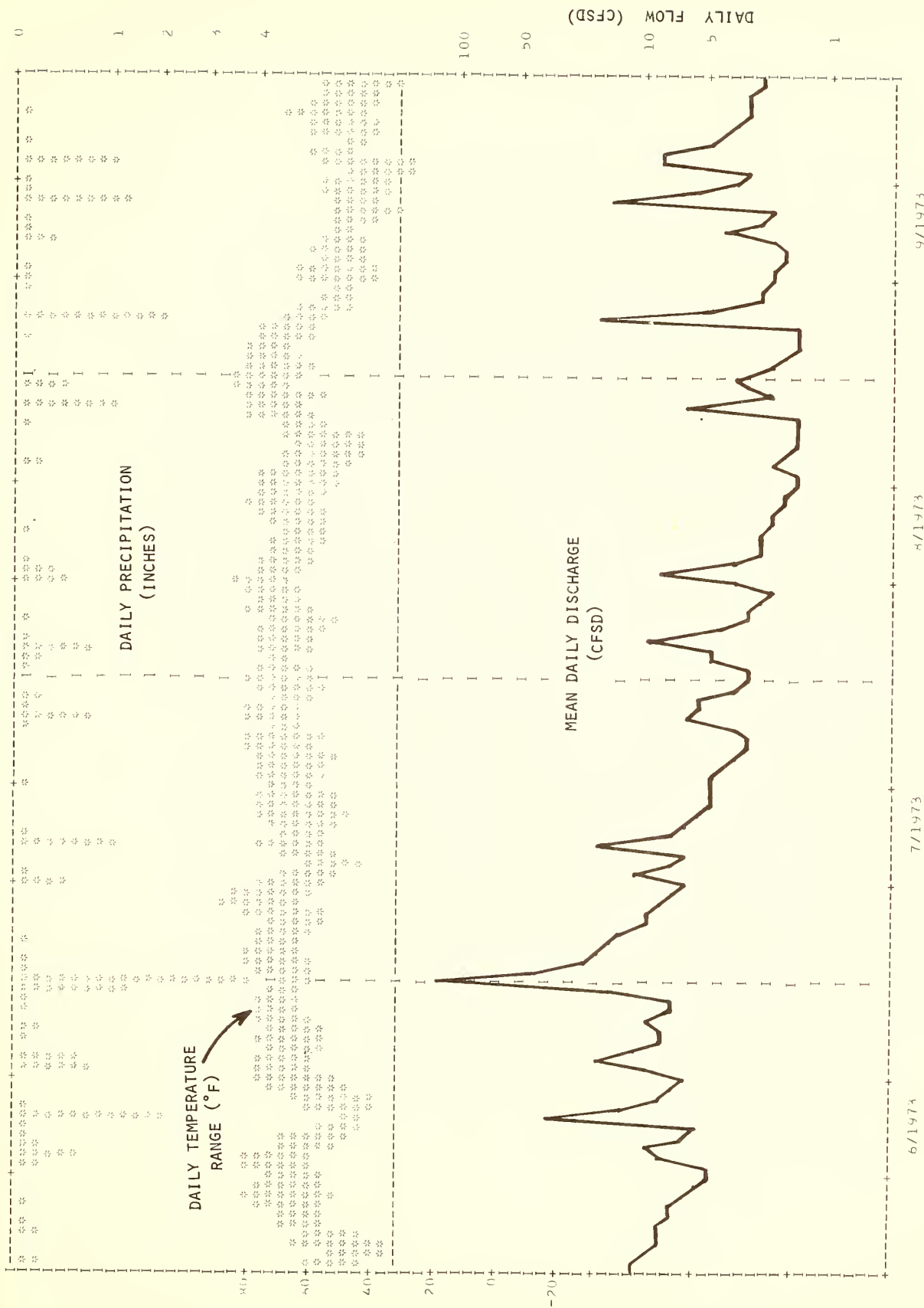
2/19/73

4/1/73

4/19/73

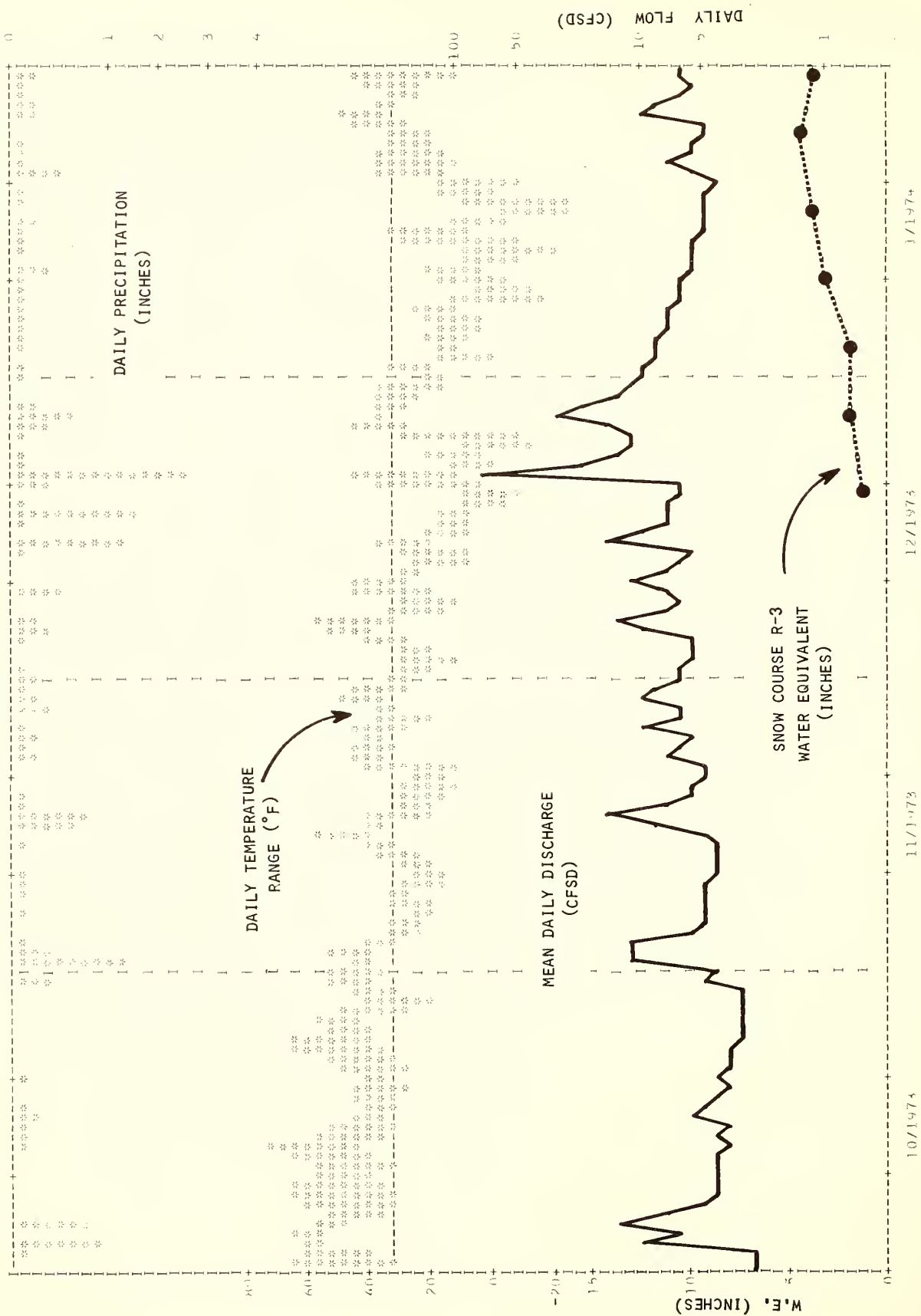
2/19/73

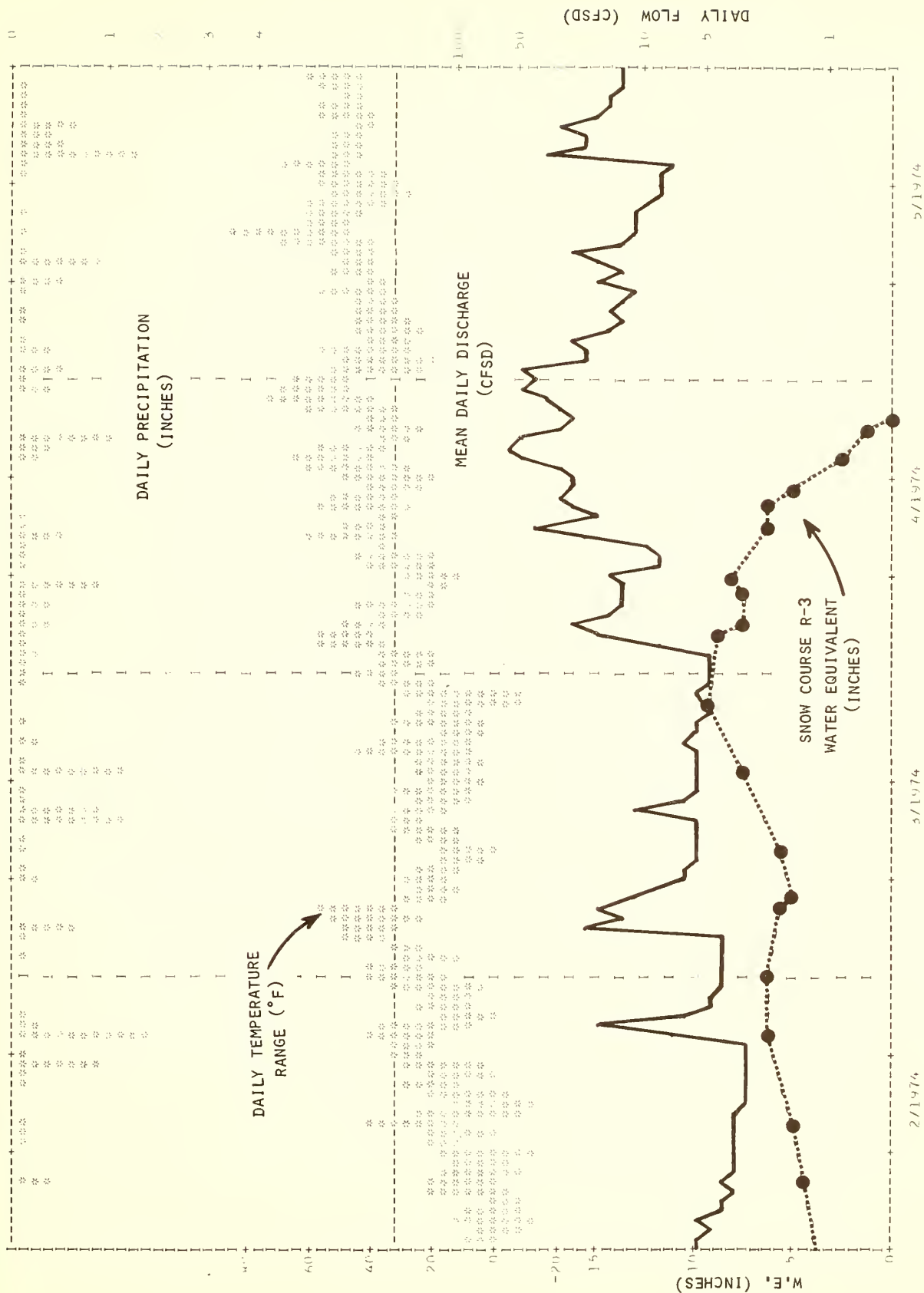
SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- FEB 1973 - MAY 1973



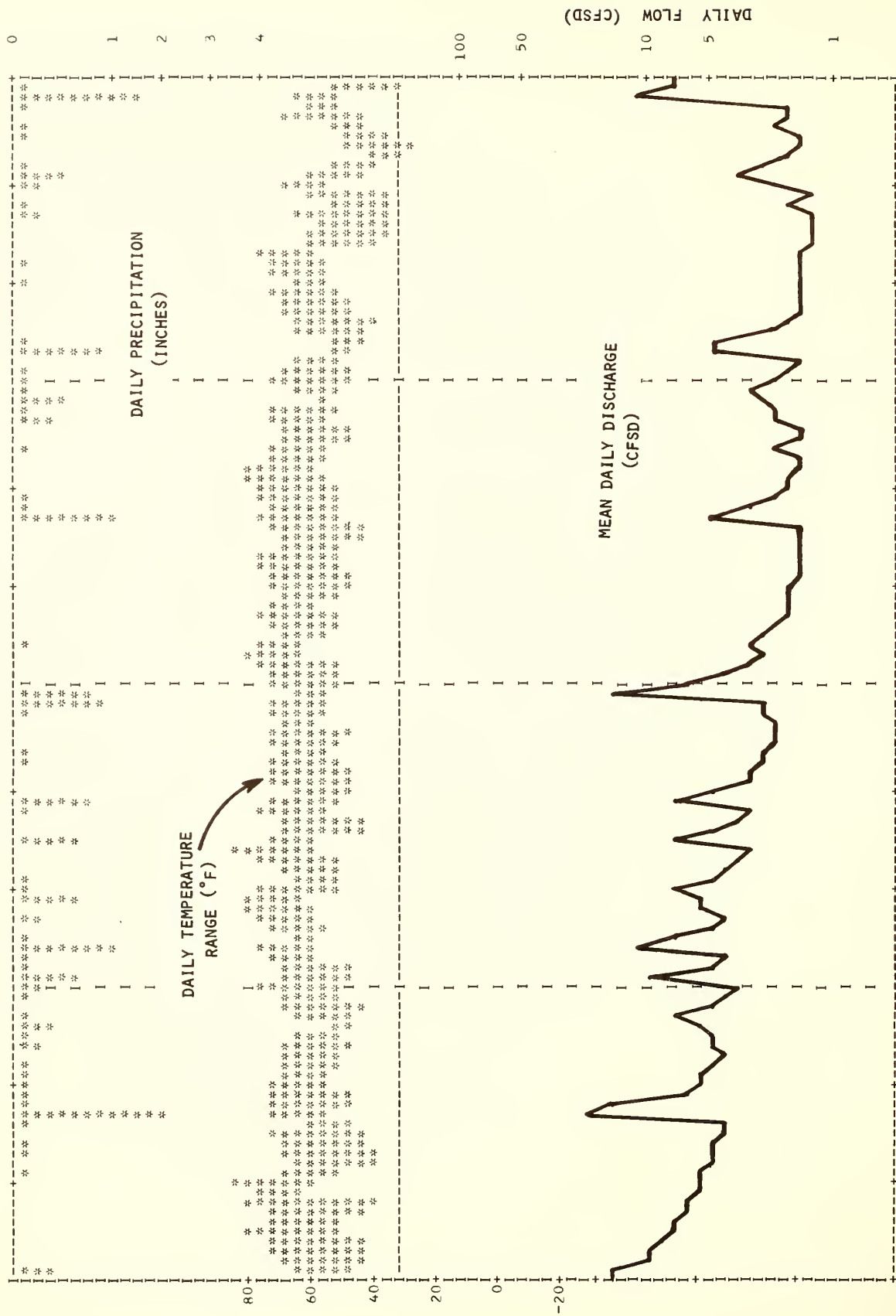
SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT -- JUN 1973 - SEP 1973







SUMMARY OF DAILY DATA FOR W-3 WATERSHED NEAR DANVILLE, VERMONT --- FEB 1974 -- MAY 1974



## APPENDIX B

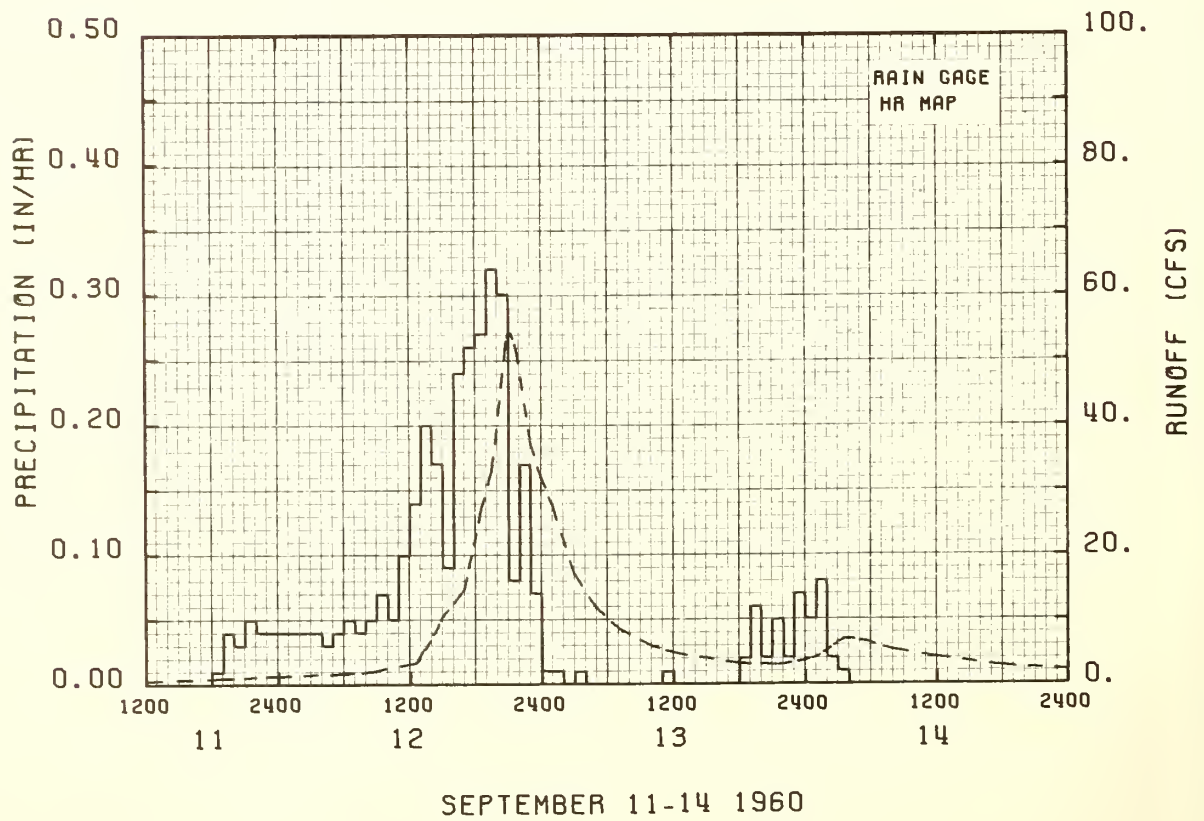
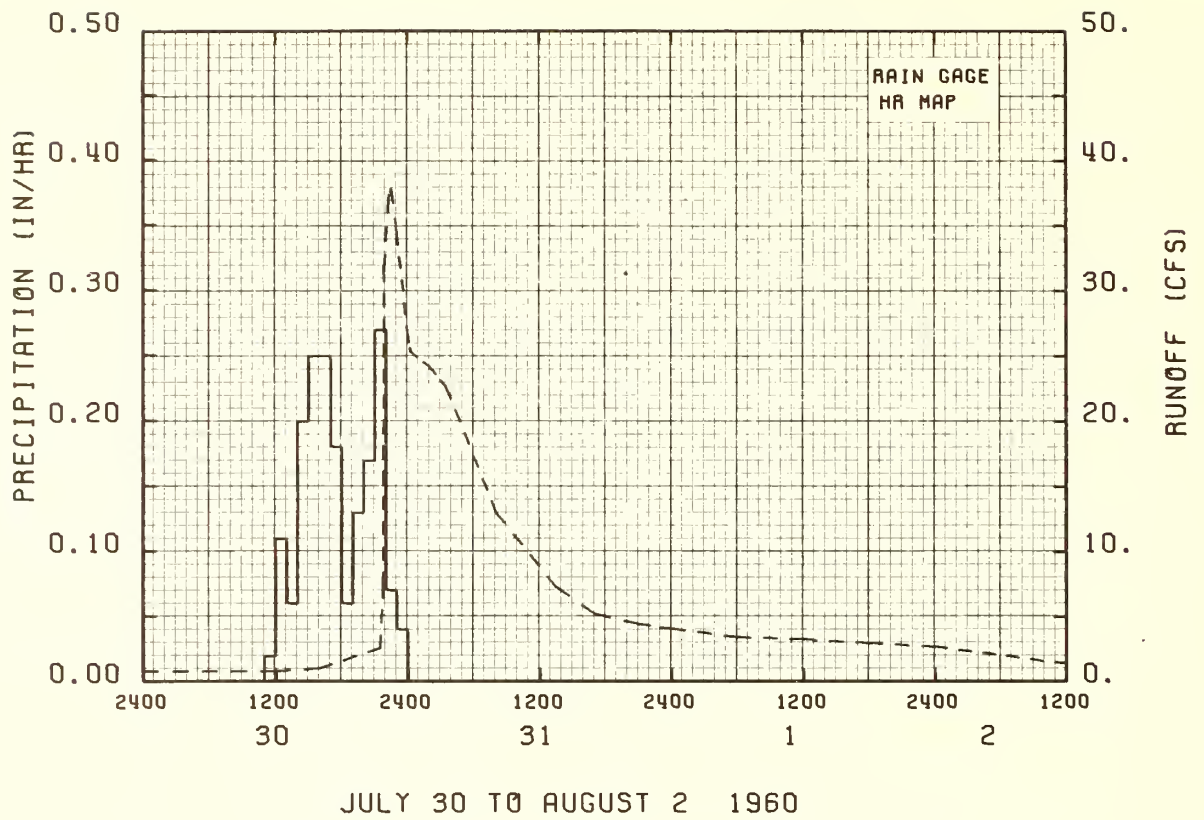
### PLOTS OF SELECTED RUNOFF EVENTS

This appendix contains plots showing hourly mean areal precipitation and instantaneous discharge for 40 selected periods for the W-3 watershed. The periods are either 3 1/2, 7, or 14 days in duration. All of the largest runoff events are included. Also events with heavy precipitation, but relatively little runoff are included. There is at least one event from each water year and from each month of the year. The plots illustrate watershed response to a single burst of rain, complex rain storms, snowmelt periods, and rain-on-snow events. Most of the precipitation shown is rain. In only a few cases does snowfall occur during these major runoff periods.

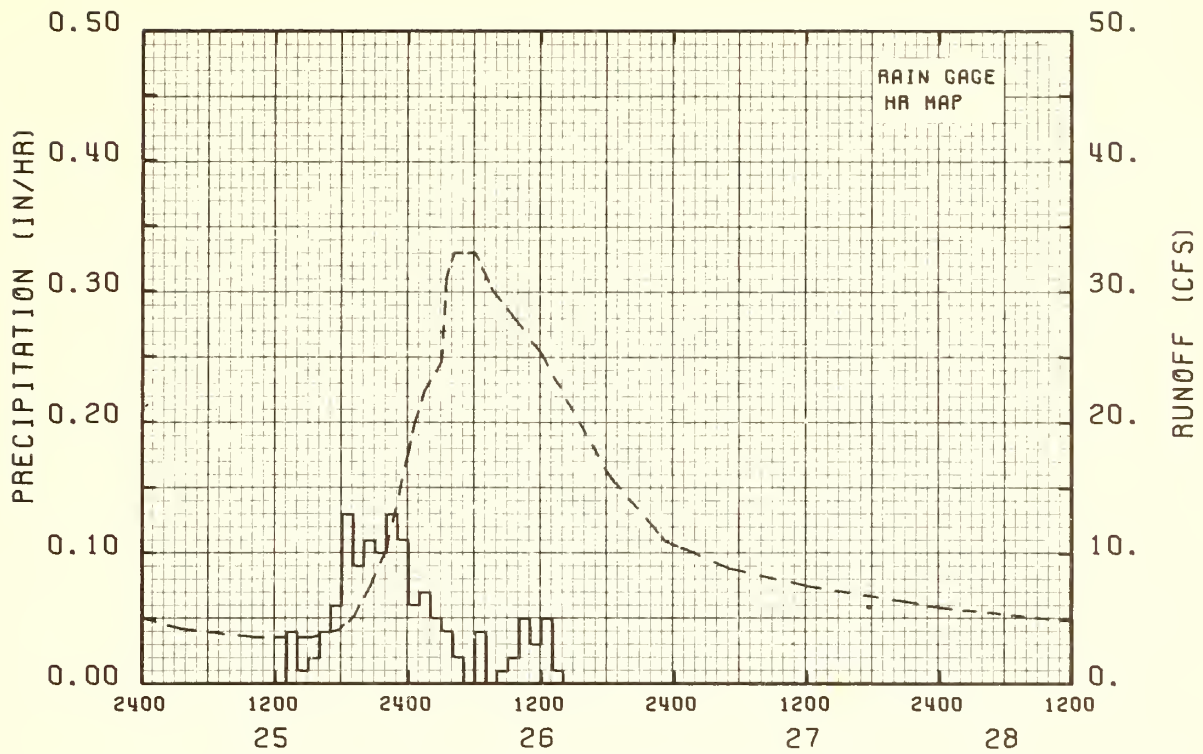
The ten largest instantaneous streamflow peaks during the period water years 1960 through 1974 on the W-3 watershed are tabulated below.

| <u>date</u> | <u>time</u> | <u>peak discharge (cfs)</u> |
|-------------|-------------|-----------------------------|
| 6/30/73     | 0940        | 376                         |
| 6/30/73     | 1830        | 282                         |
| 5/20/69     | 1035        | 251                         |
| 5/4/72      | 1715        | 207                         |
| 4/21/63     | 2140        | 172                         |
| 12/21/73    | 1430        | 163                         |
| 8/3/71      | 1555        | 153                         |
| 8/28/71     | 1305        | 141                         |
| 5/3/72      | 1300        | 127                         |
| 4/24/70     | 1700        | 121                         |

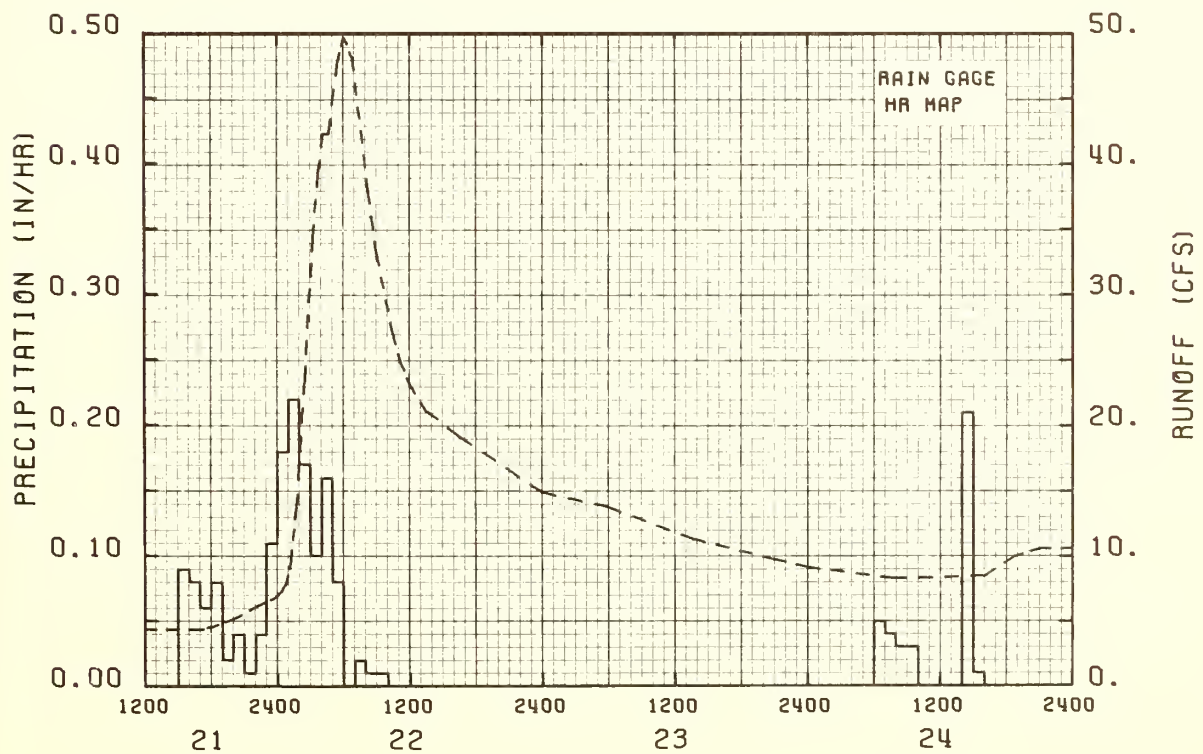
No other measured peak flow exceeded 100 cfs.



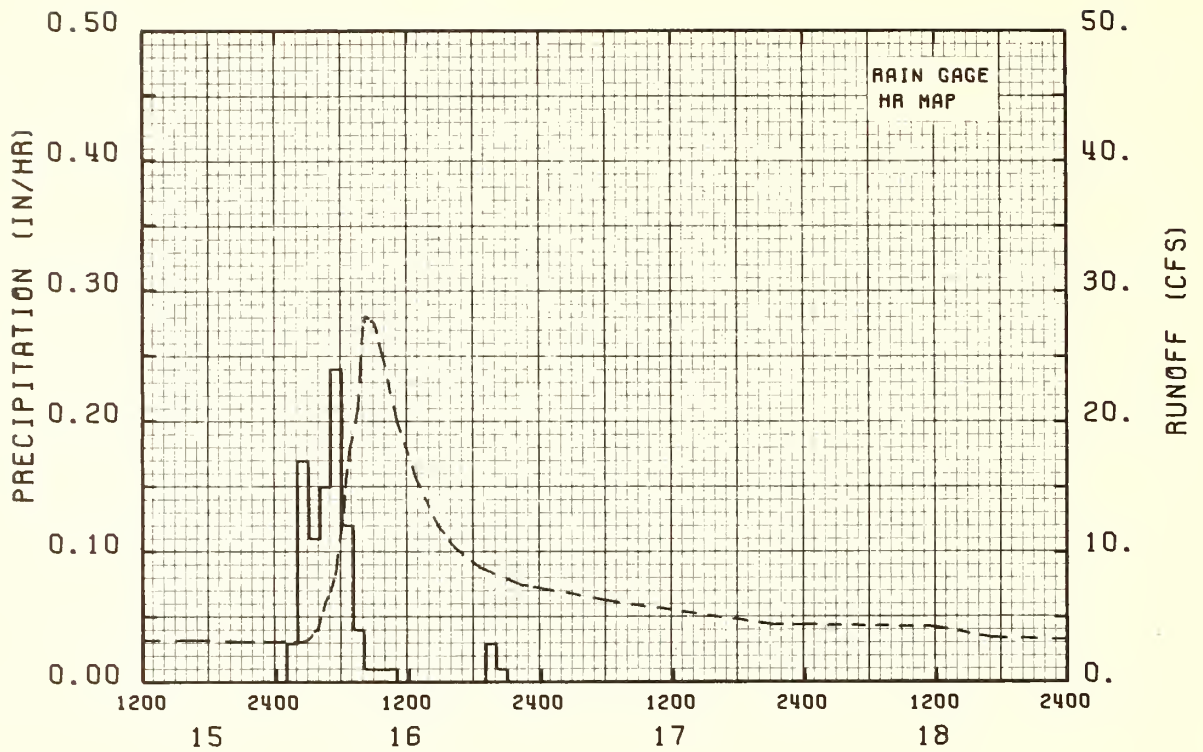




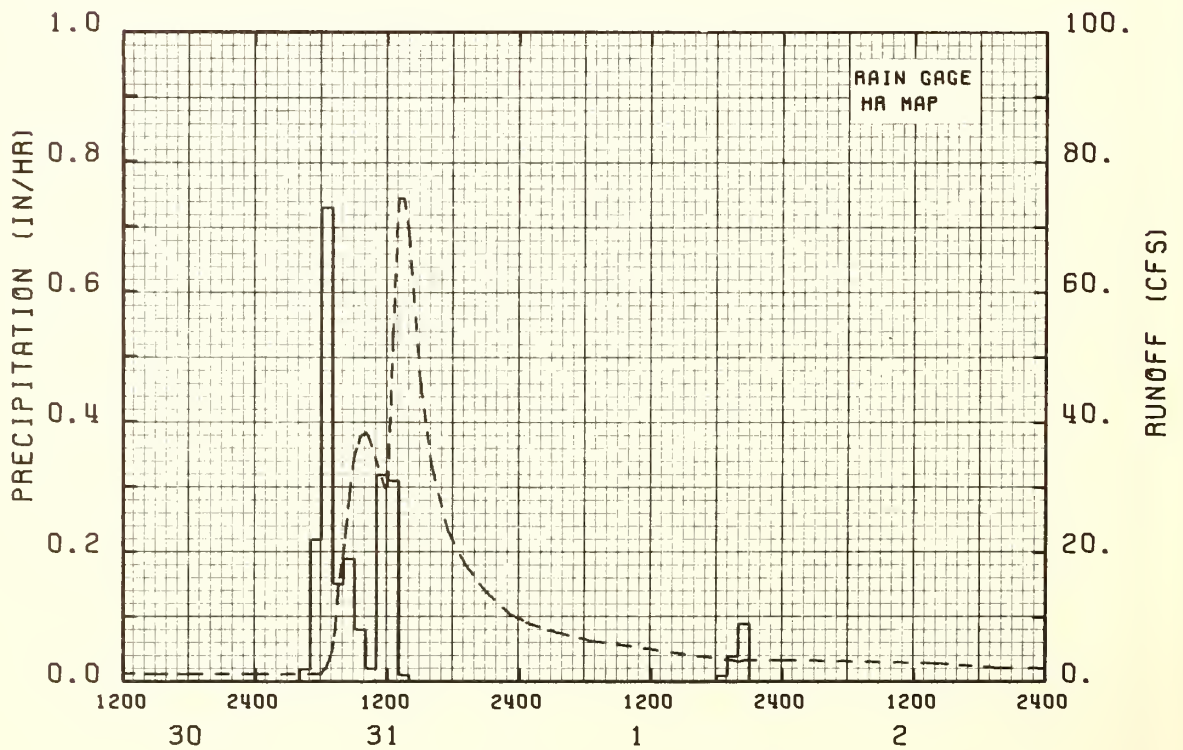
FEBRUARY 25-28 1961



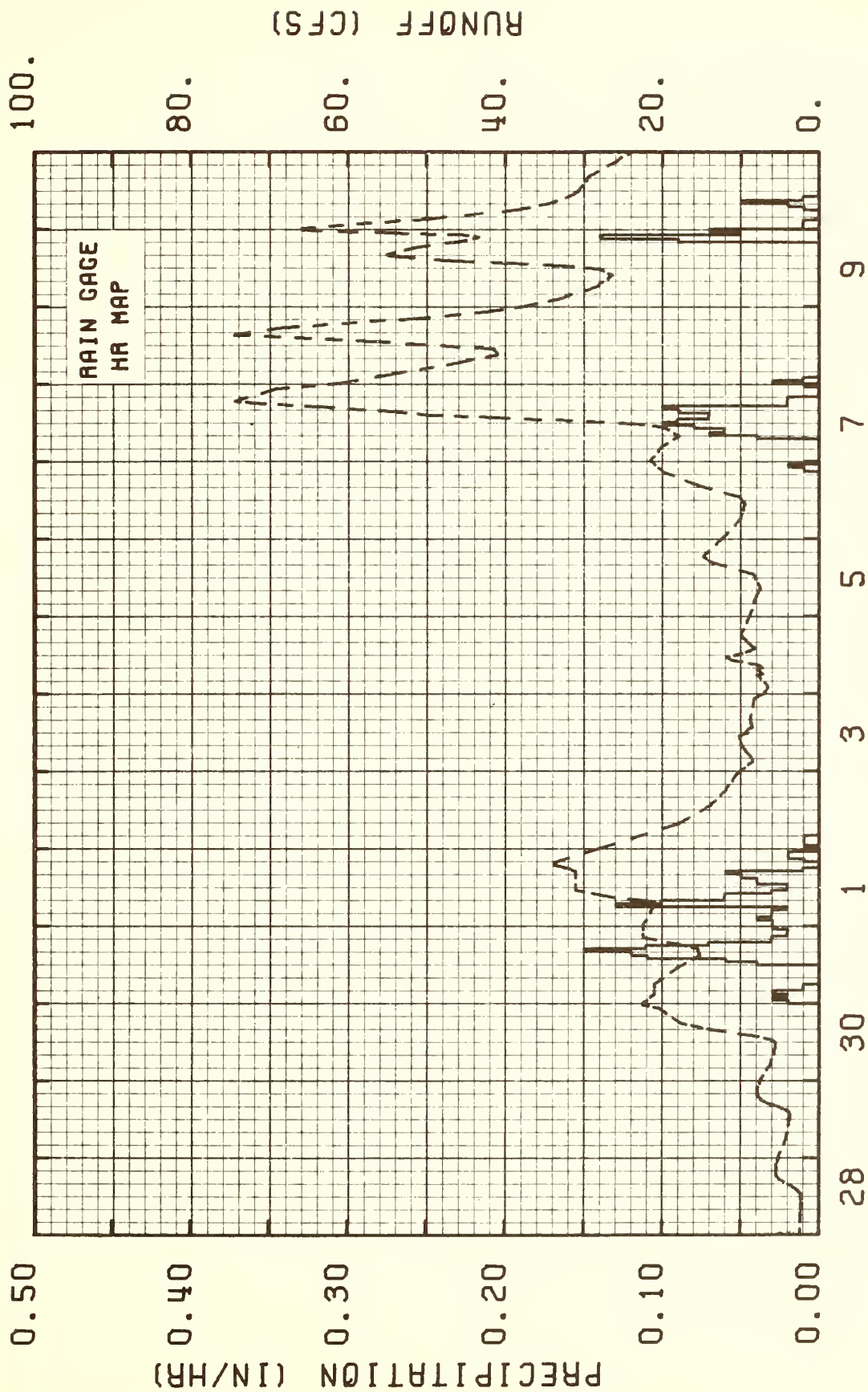
JUNE 21-24 1961



JULY 15-18 1961

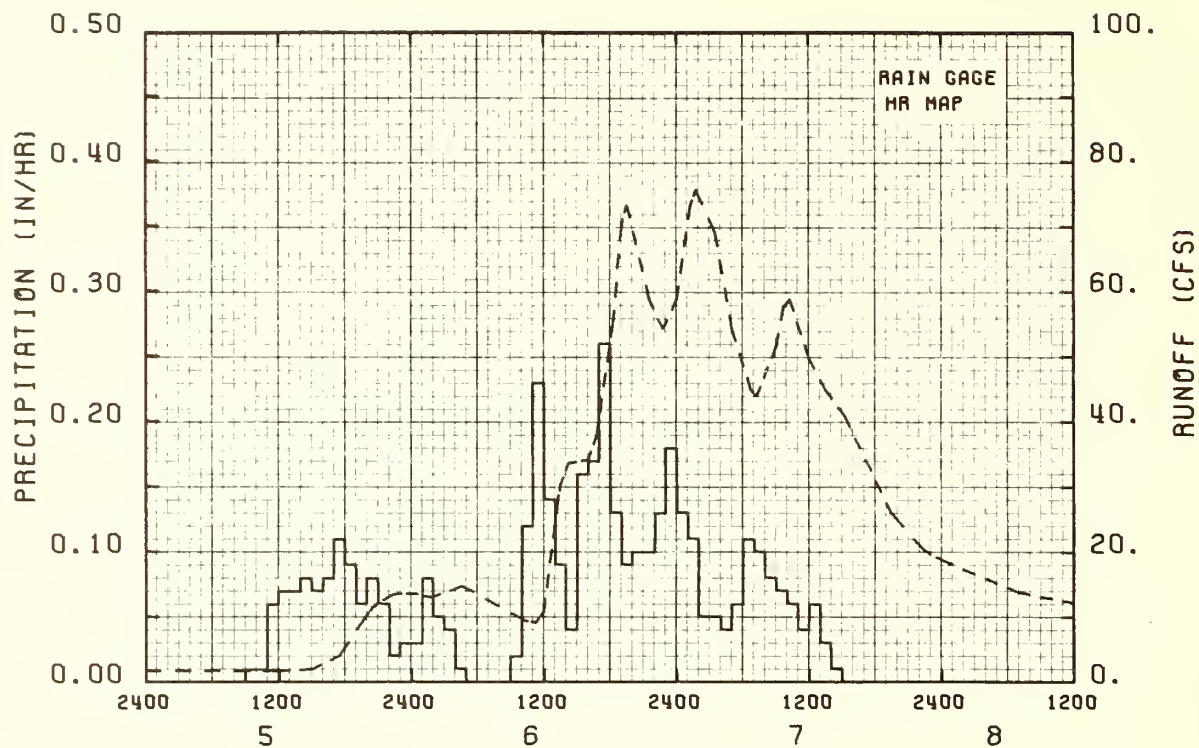


JULY 30 TO AUGUST 2 1962

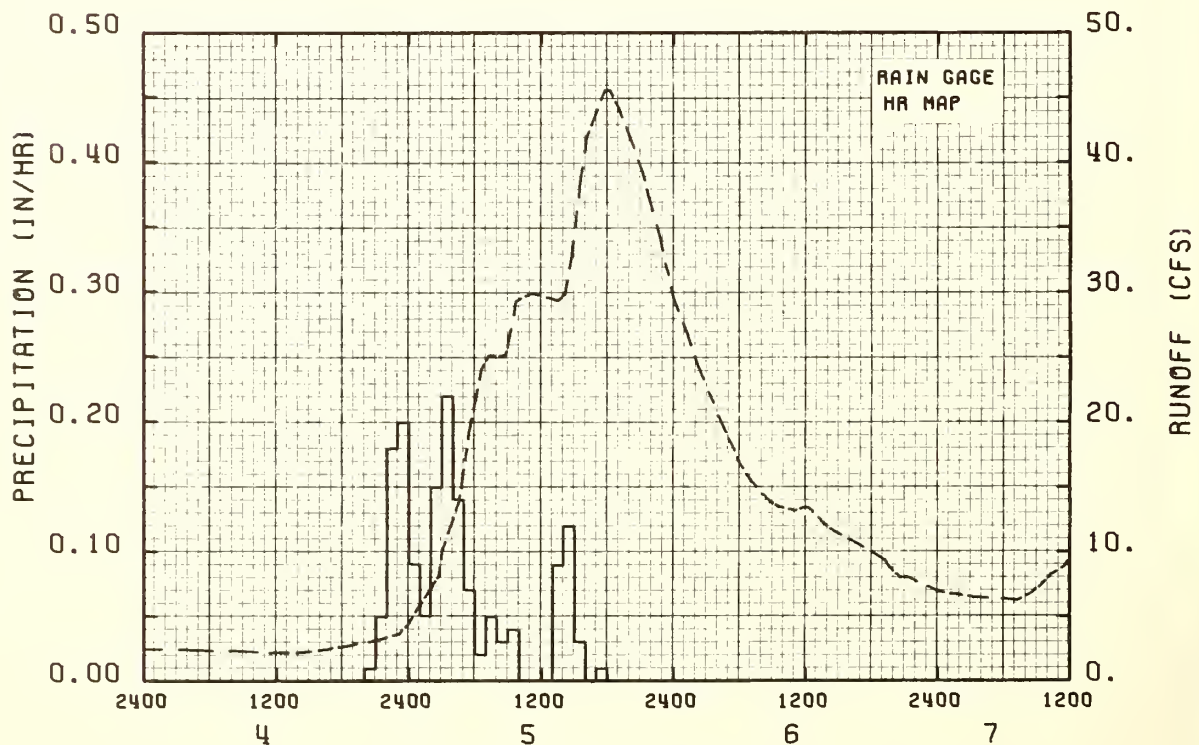


MARCH 28 TO APRIL 10 1962

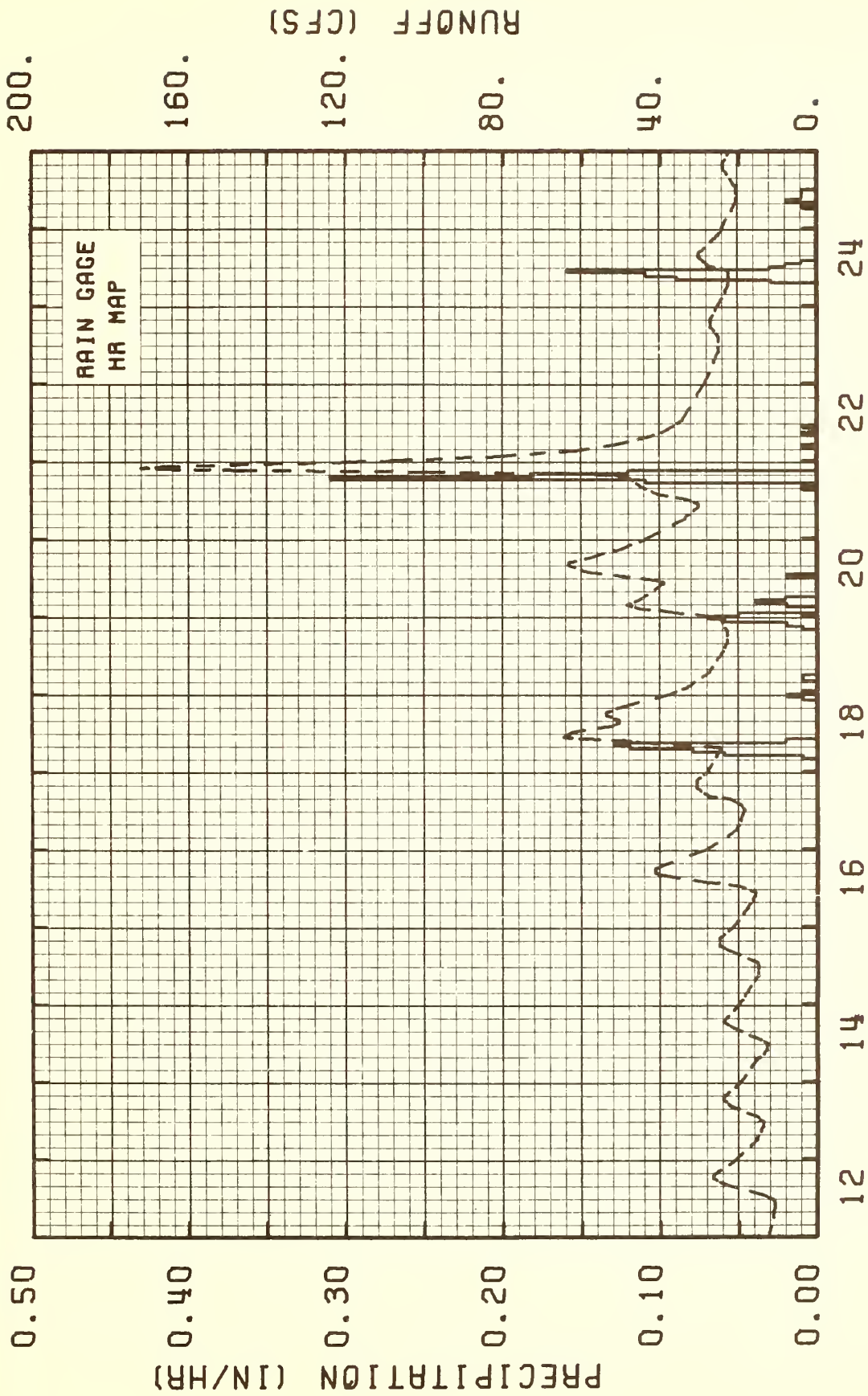




OCTOBER 5 -8 1962



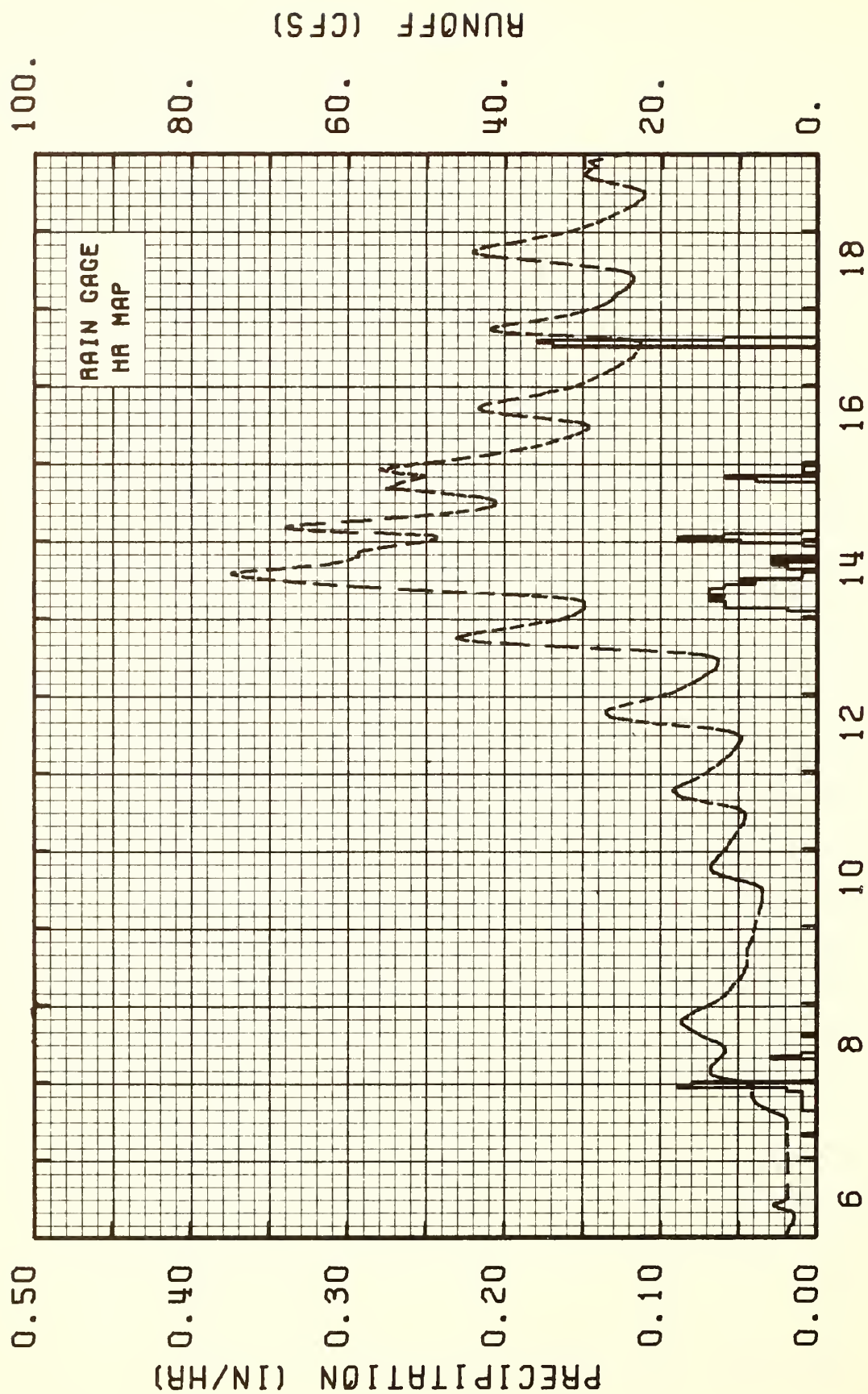
MARCH 4 -7 1964

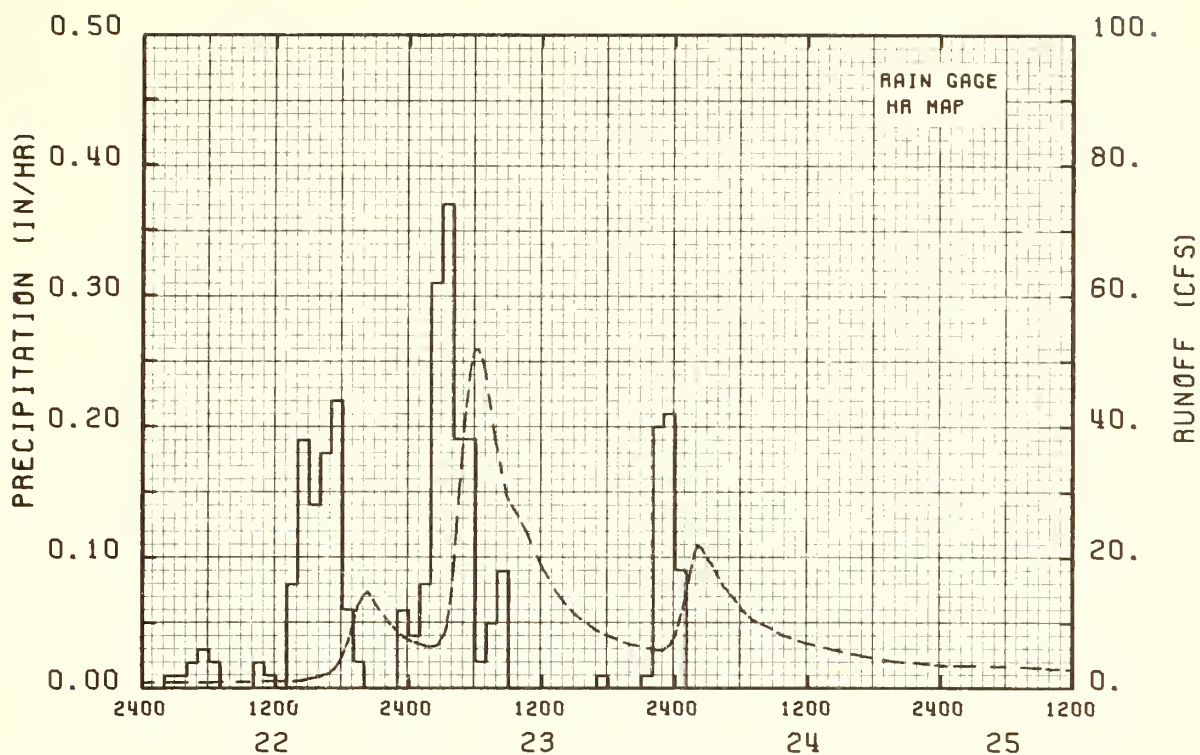


APRIL 12-25 1963

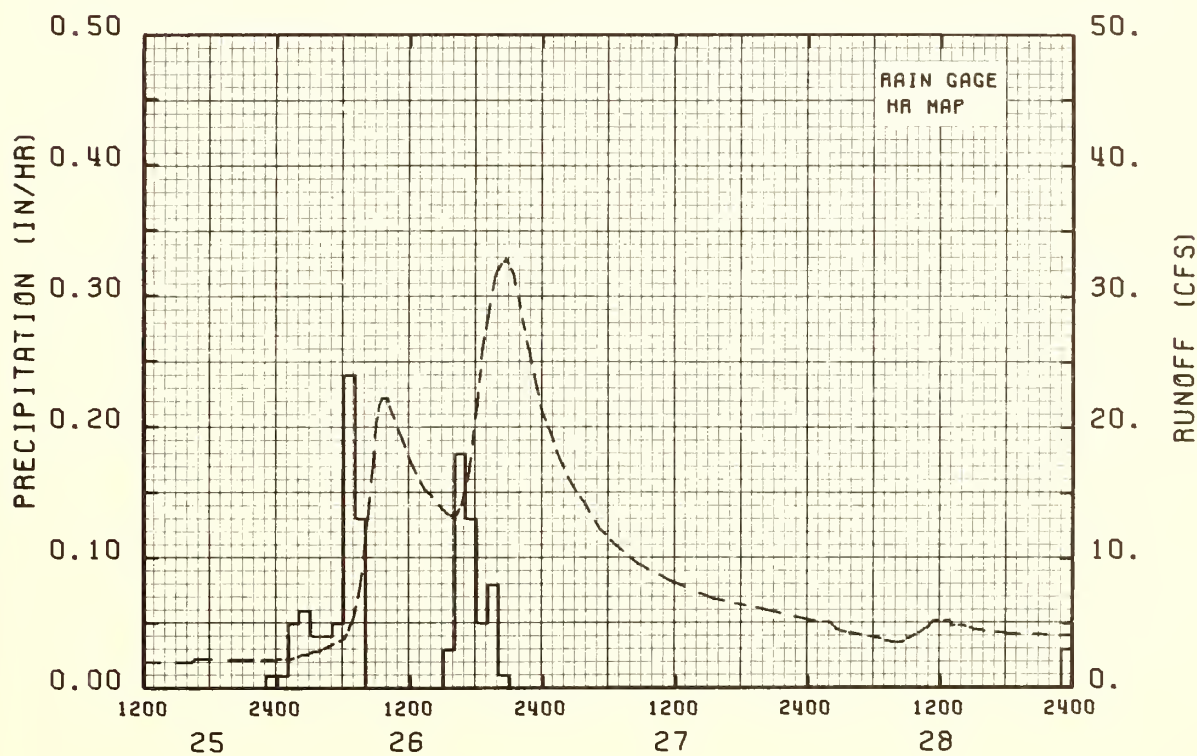


APRIL 6 -19 1964





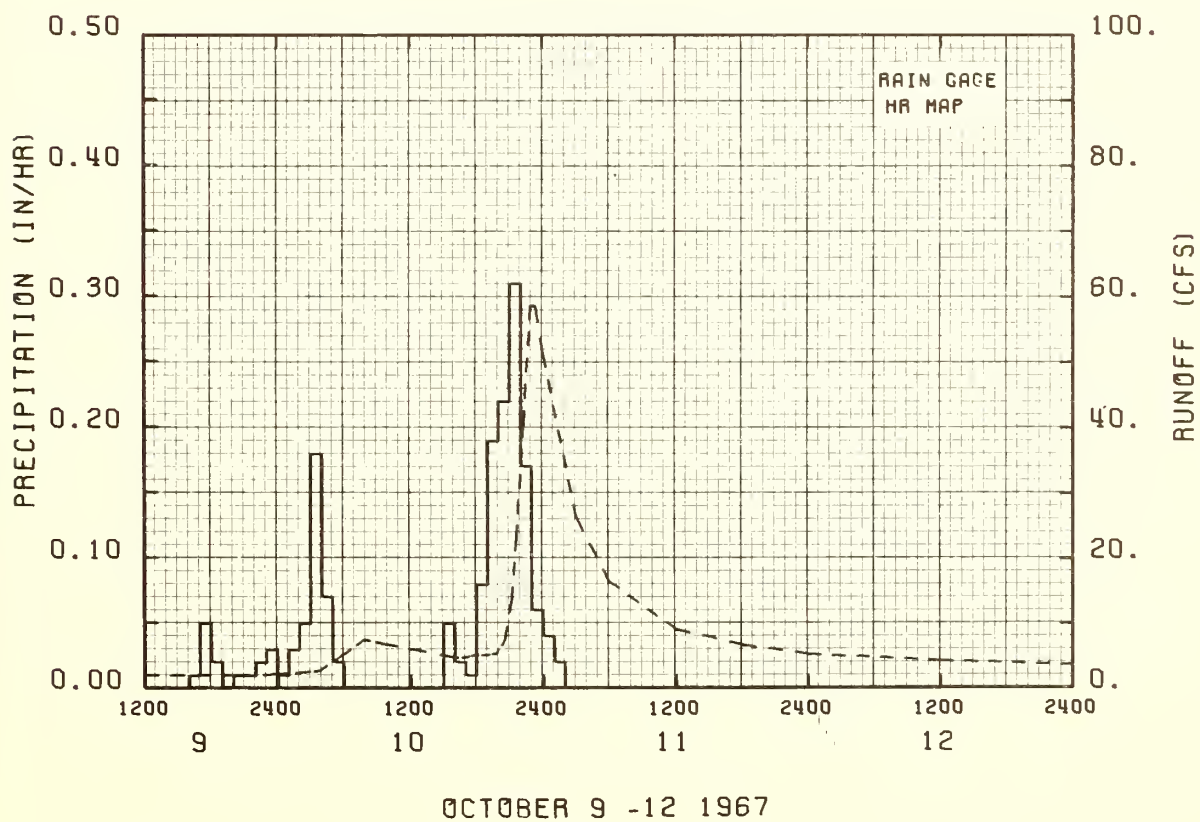
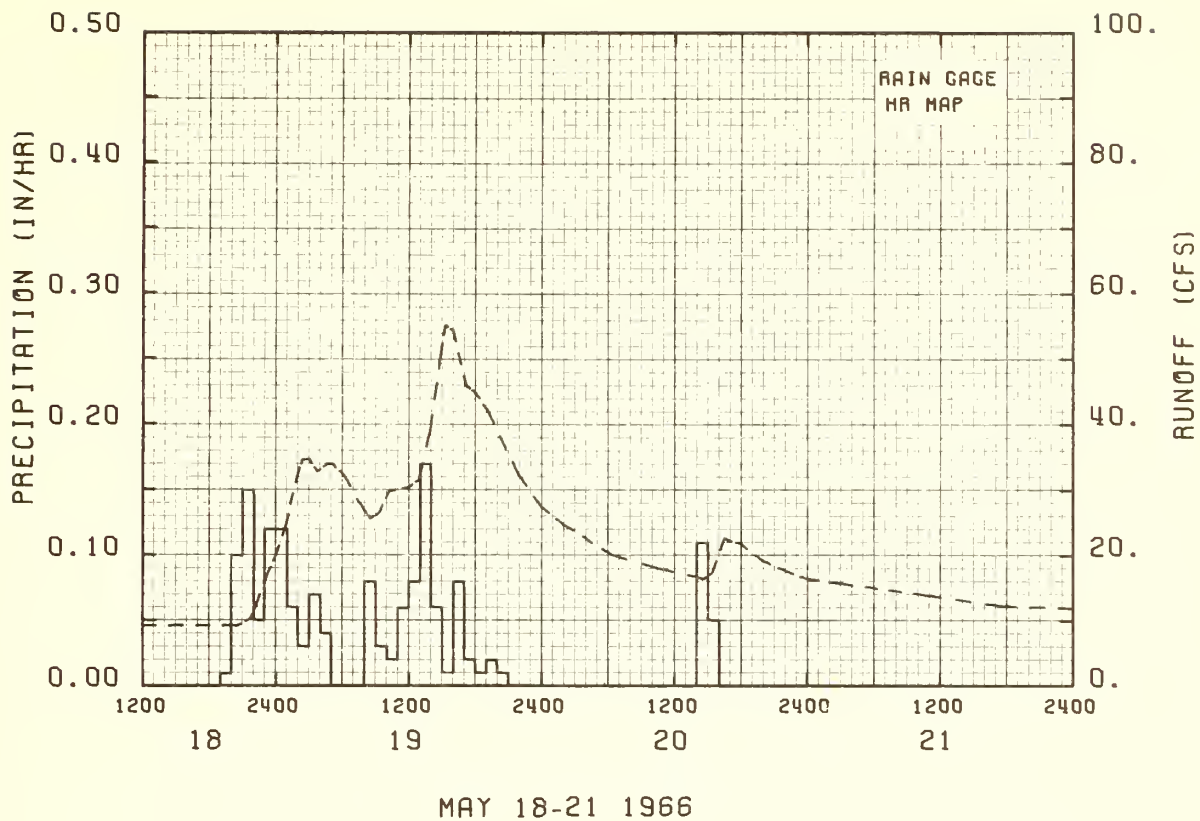
AUGUST 22-25 1964

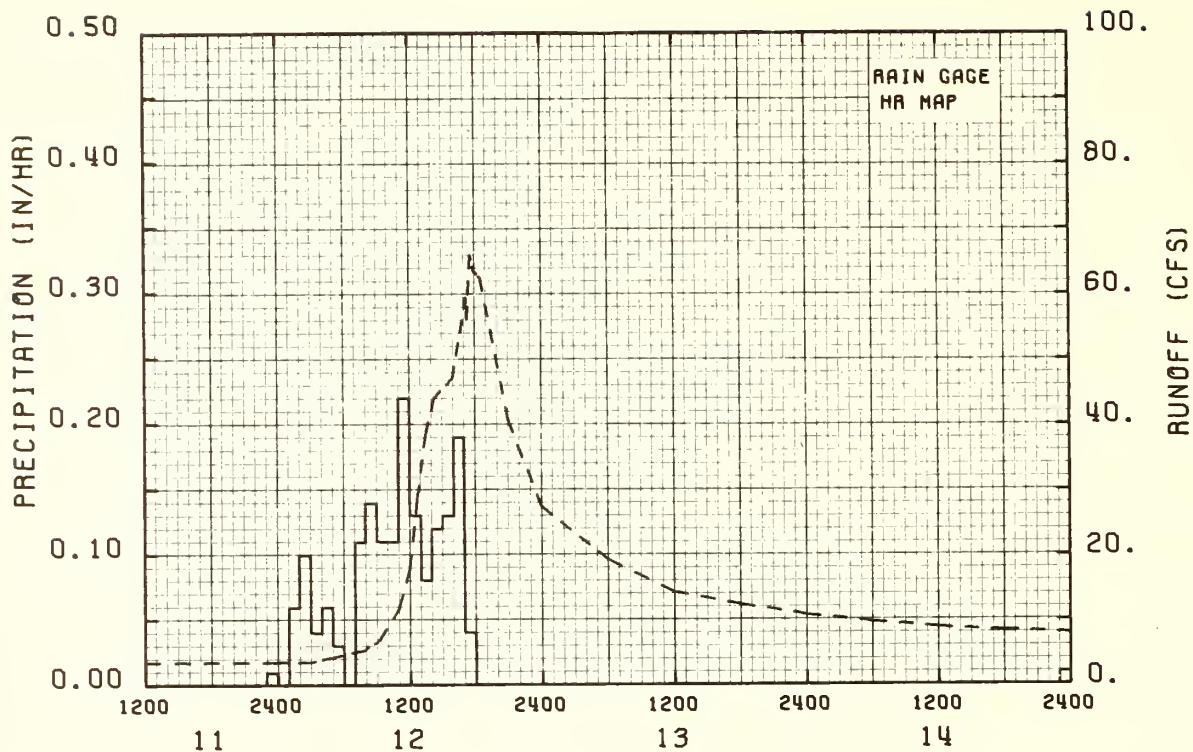


NOVEMBER 25-28 1964

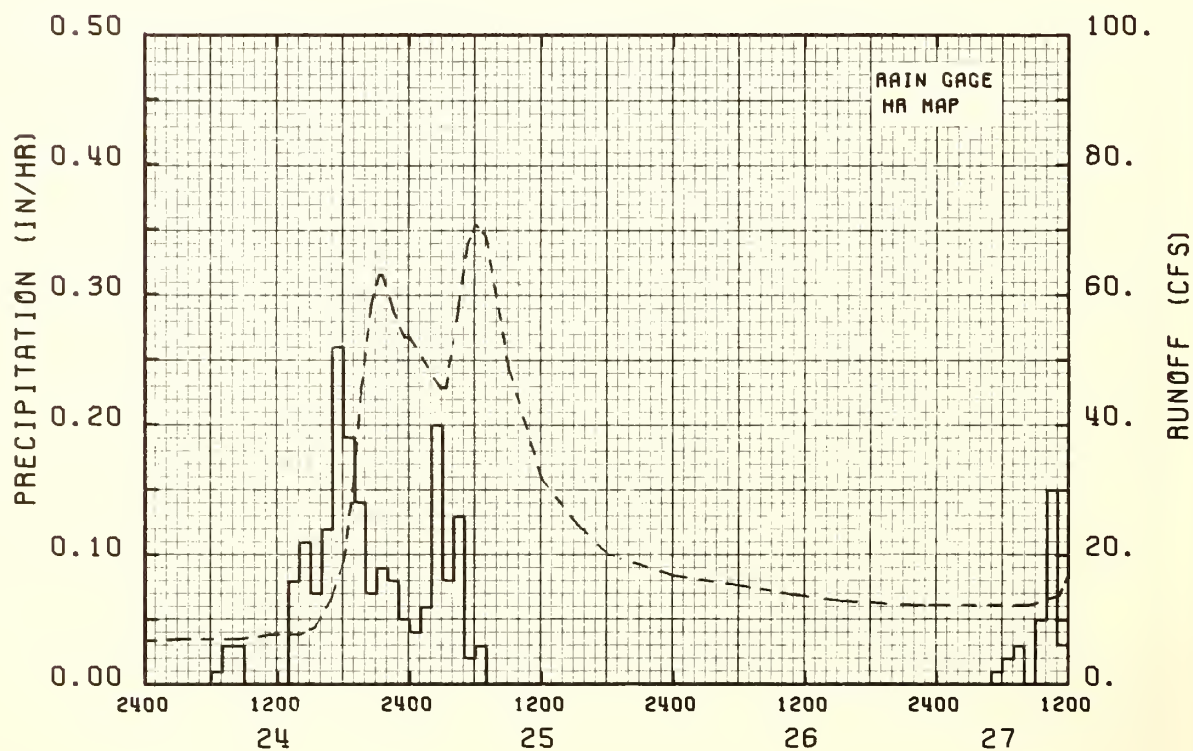






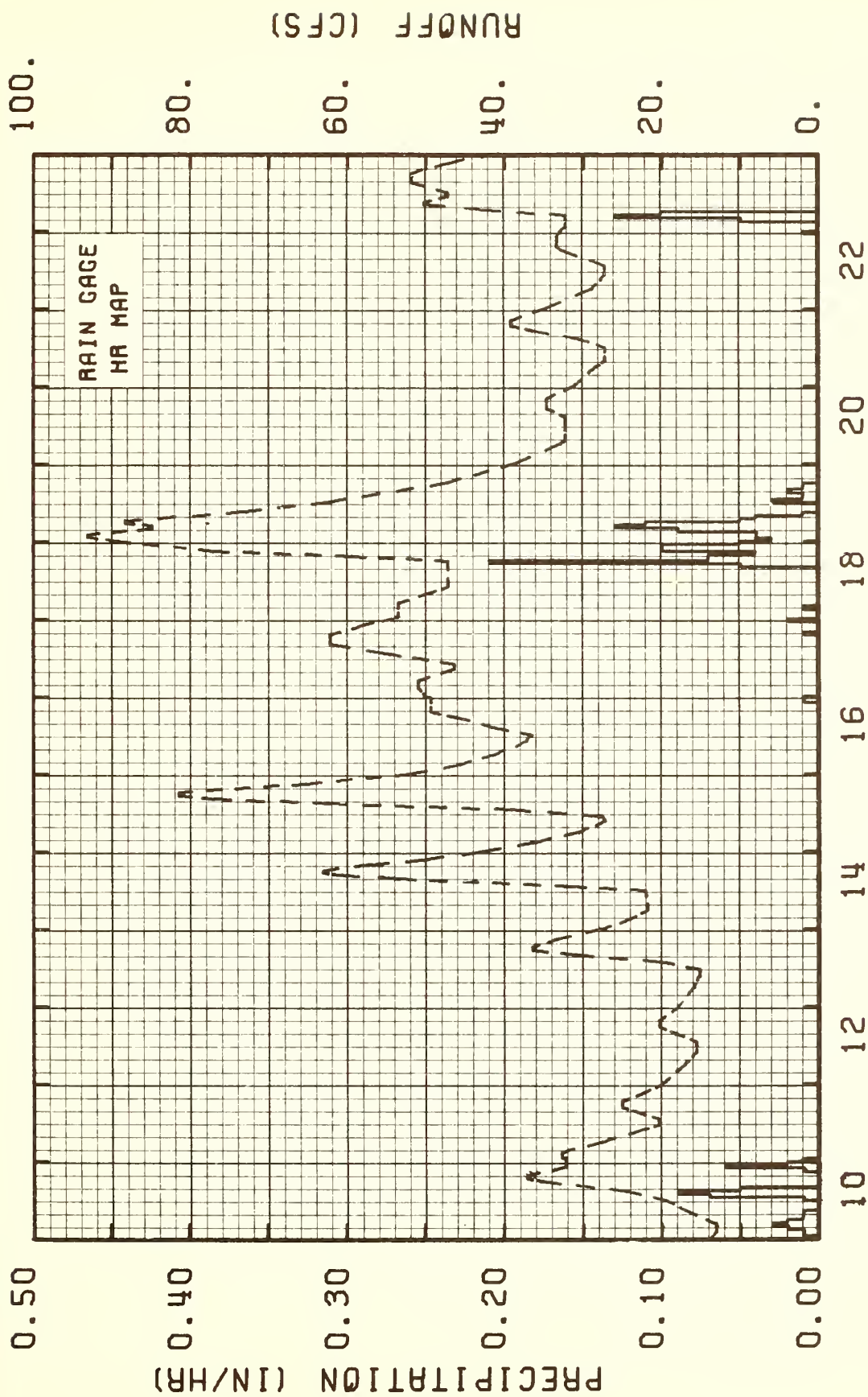


DECEMBER 11-14 1967

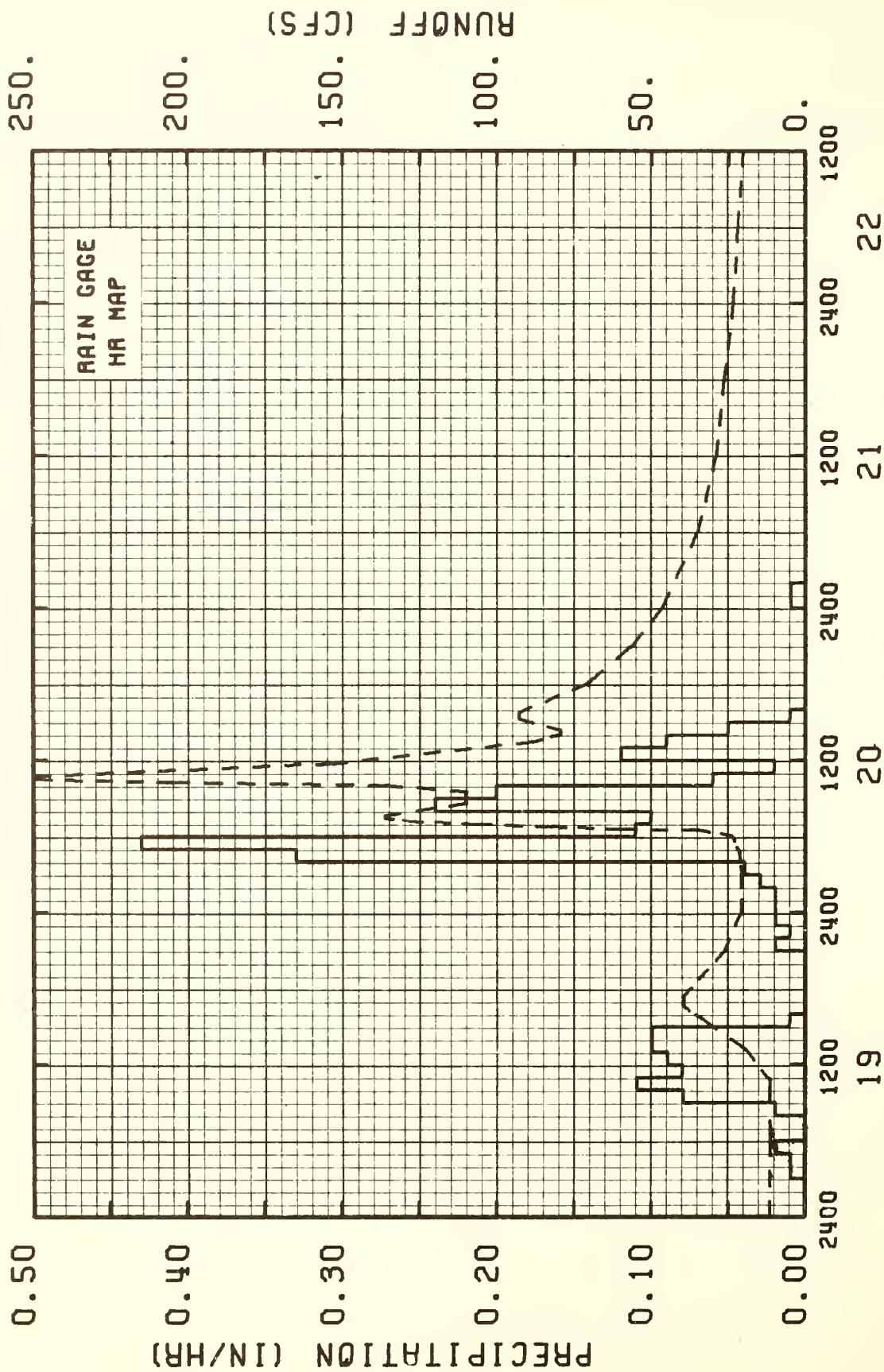


APRIL 24-27 1968

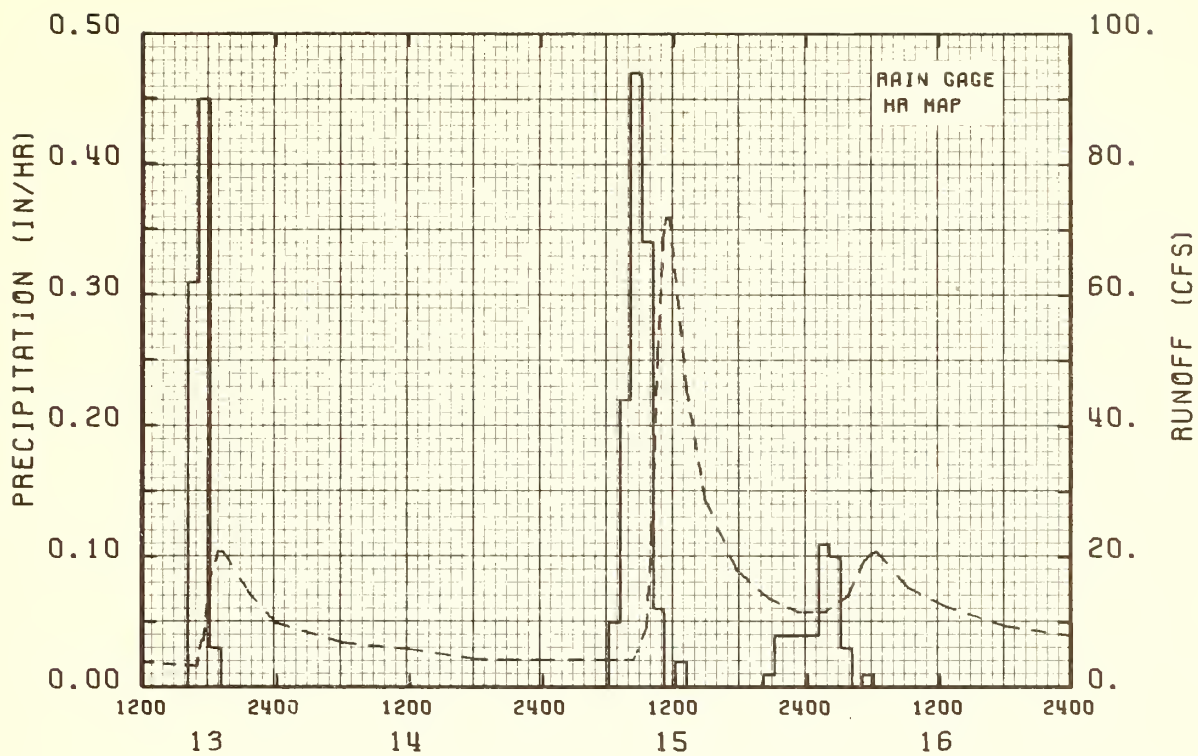




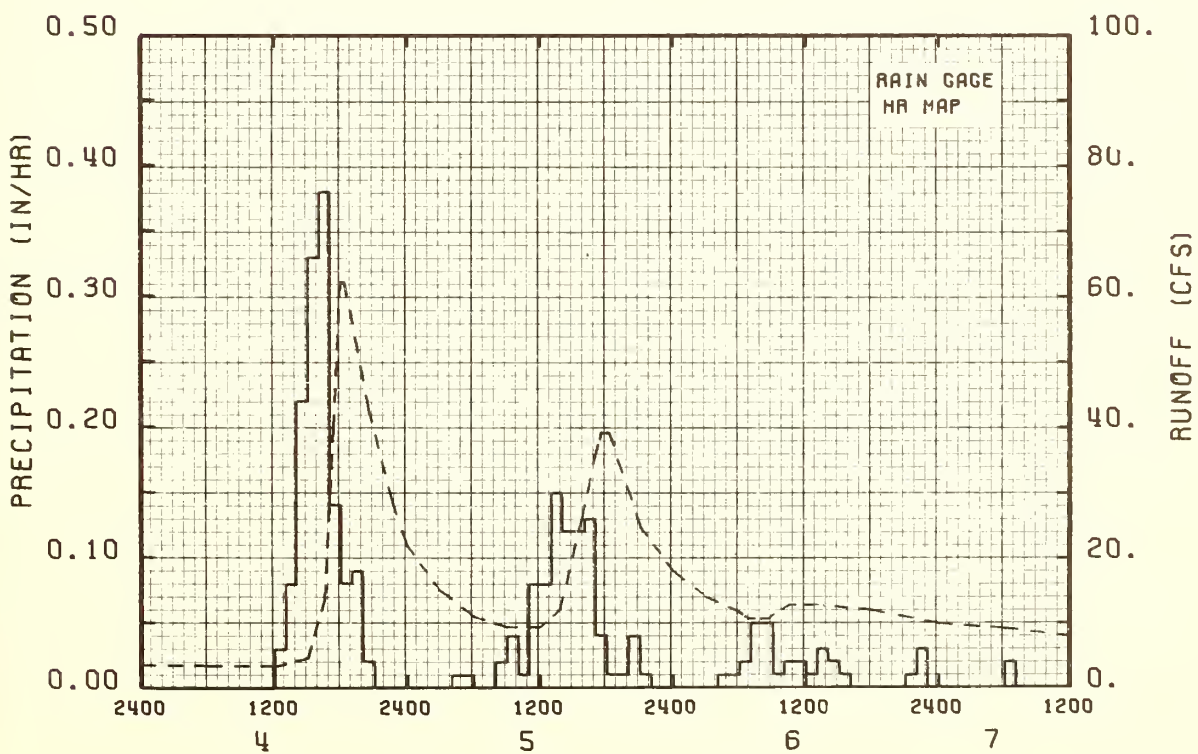
APRIL 10-23 1969



MAY 19-22 1969

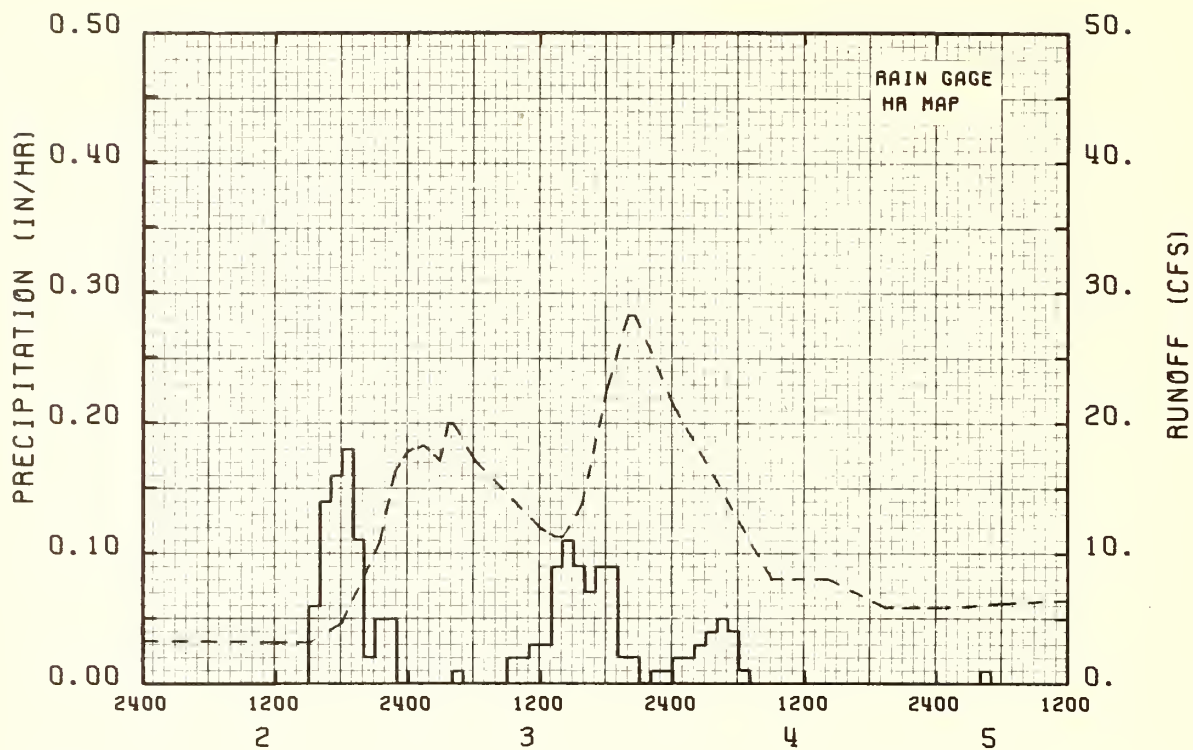


JUNE 13-16 1969

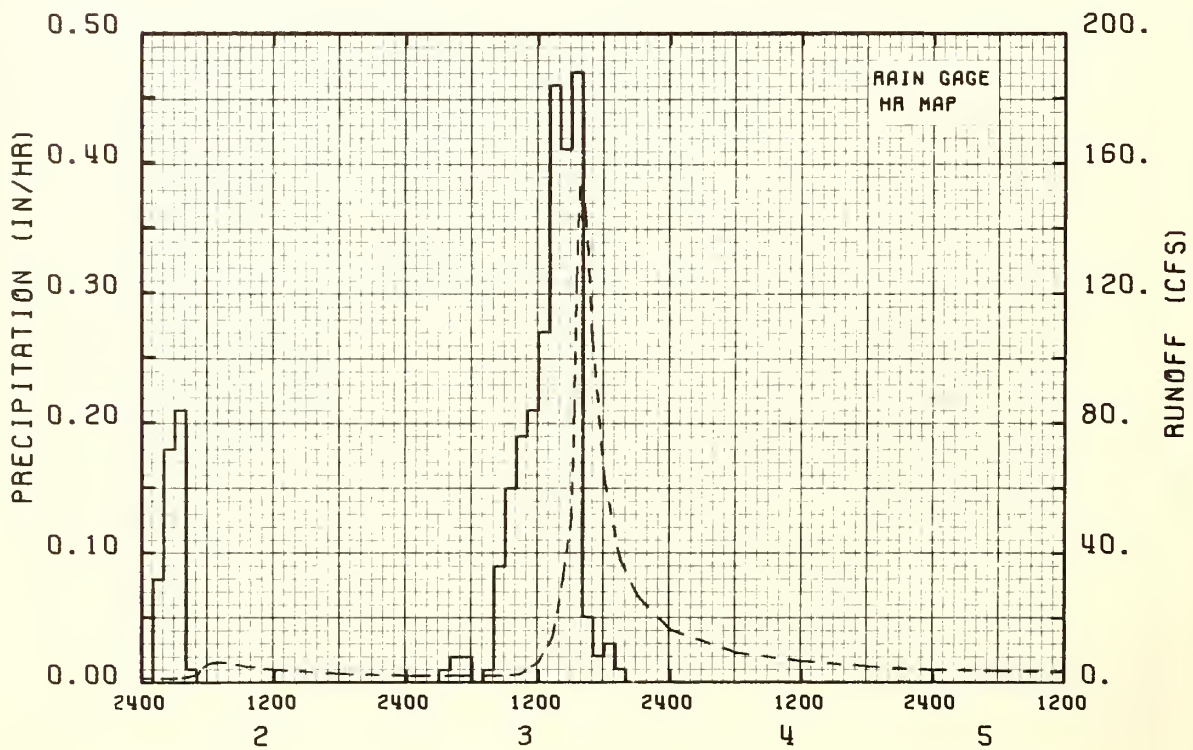


NOVEMBER 4 -7 1969

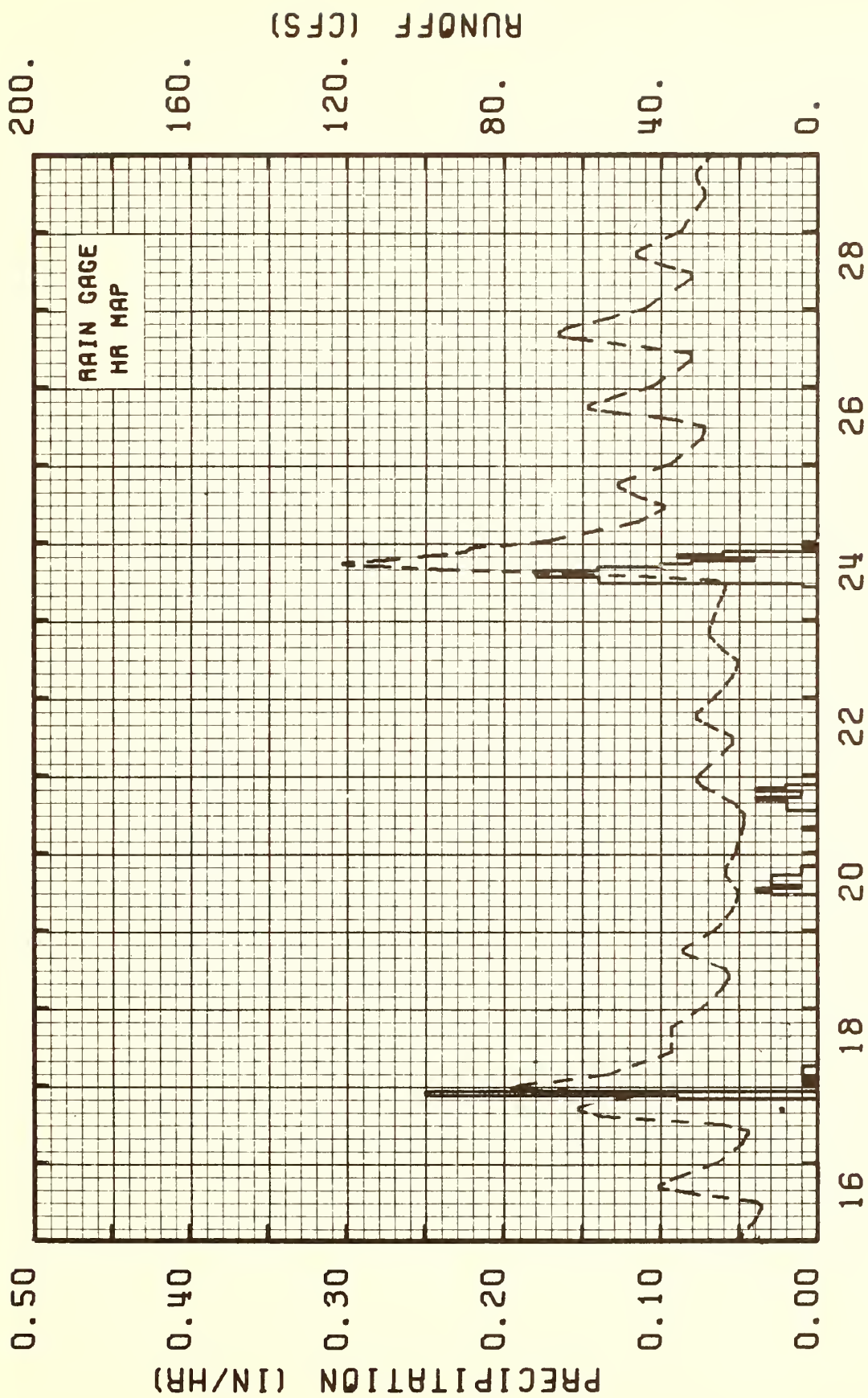




FEBRUARY 2 -5 1970



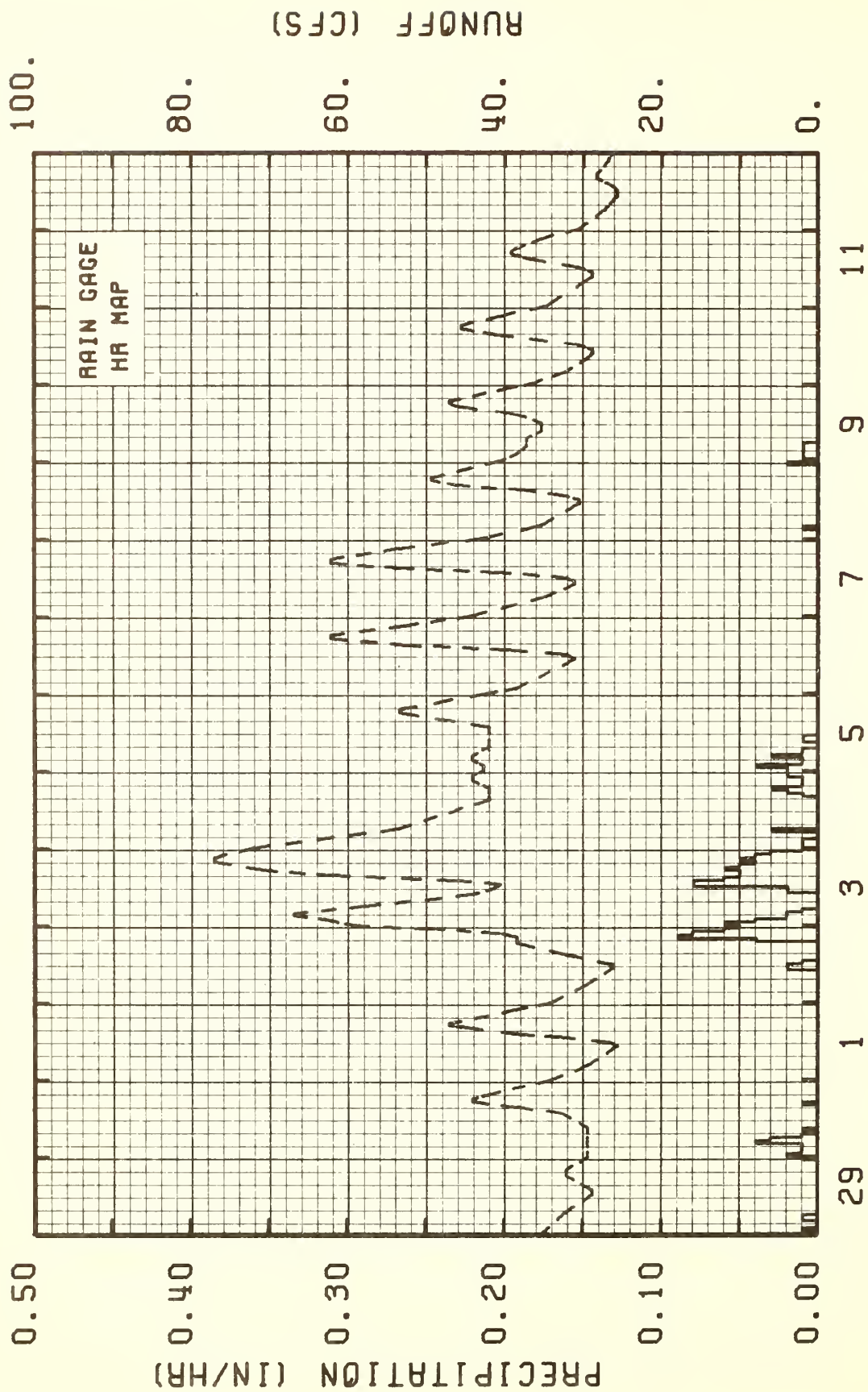
AUGUST 2 -5 1971

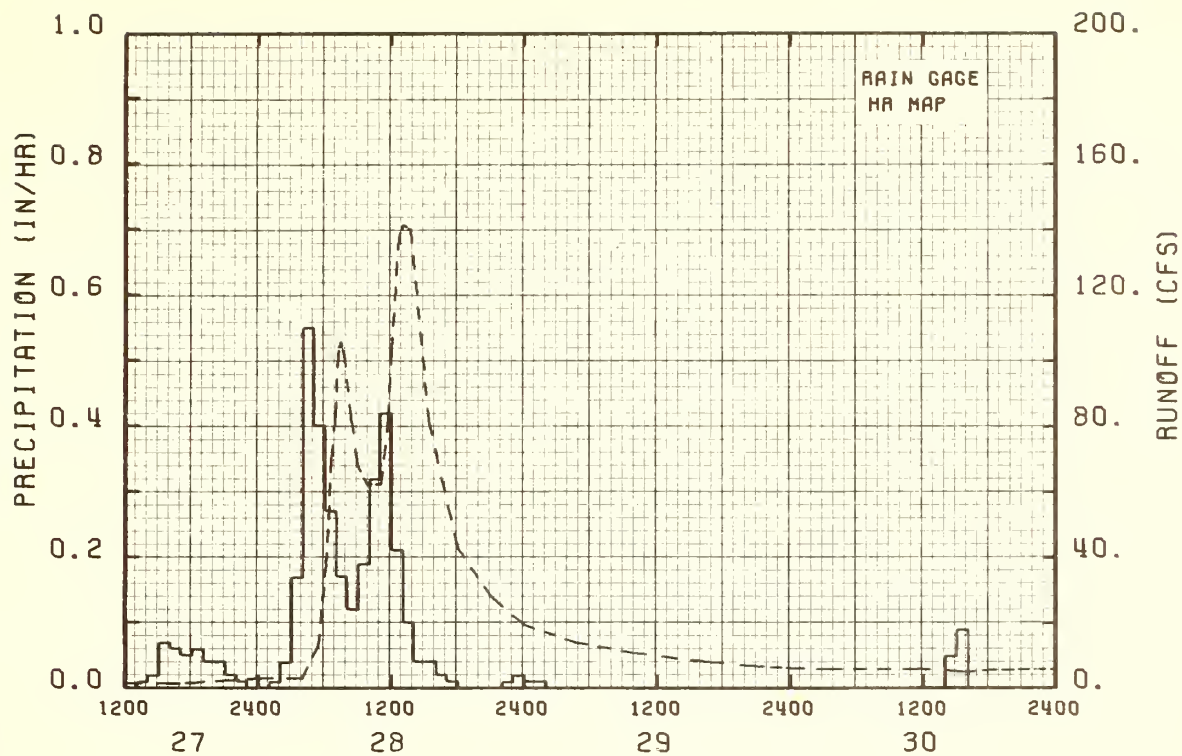


APRIL 16-29 1970

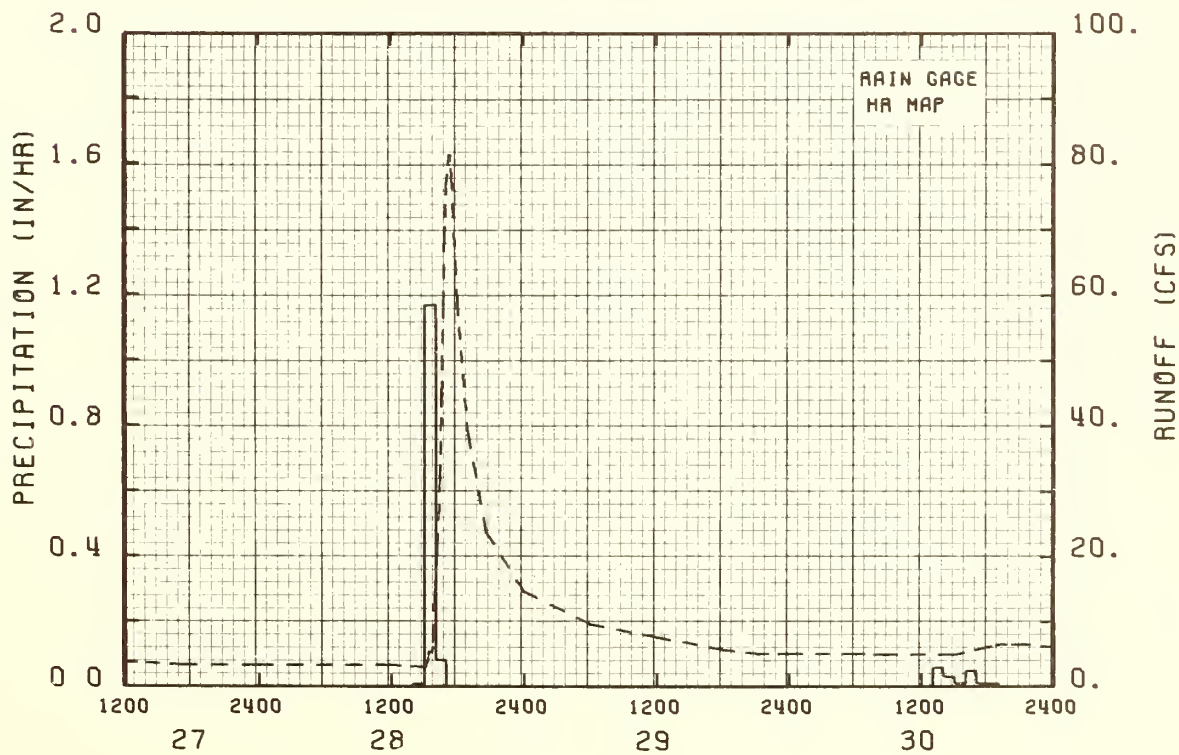


APRIL 29 TO MAY 12 1971



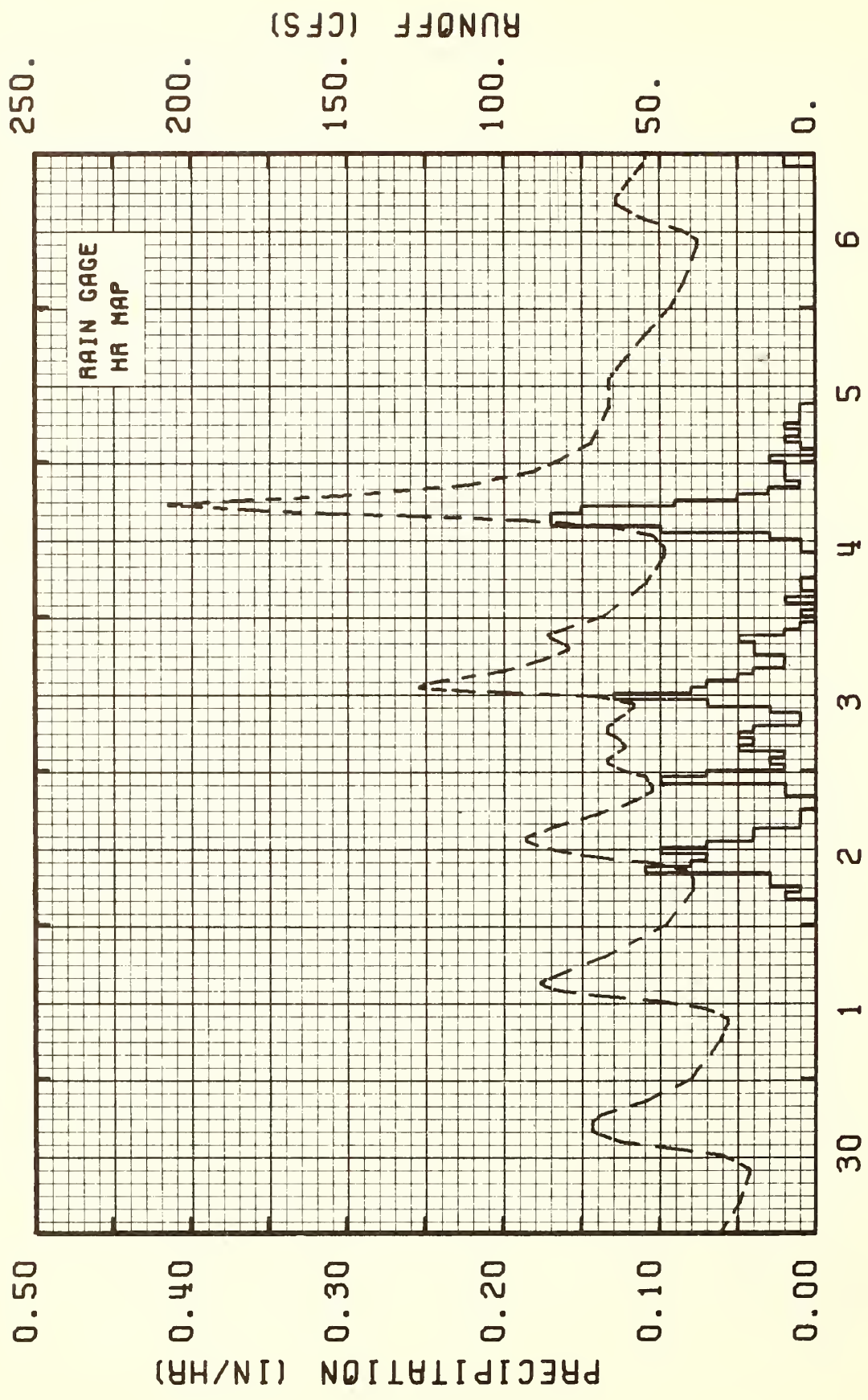


AUGUST 27-30 1971

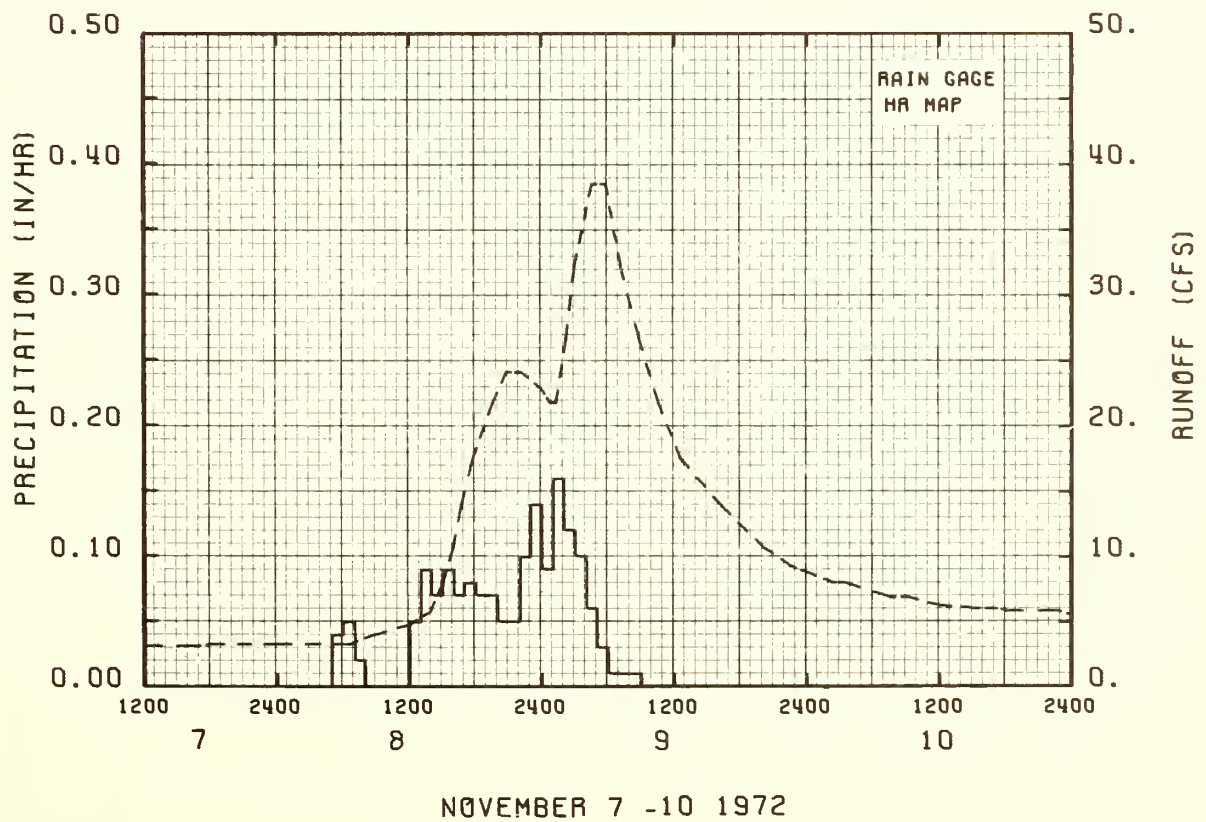
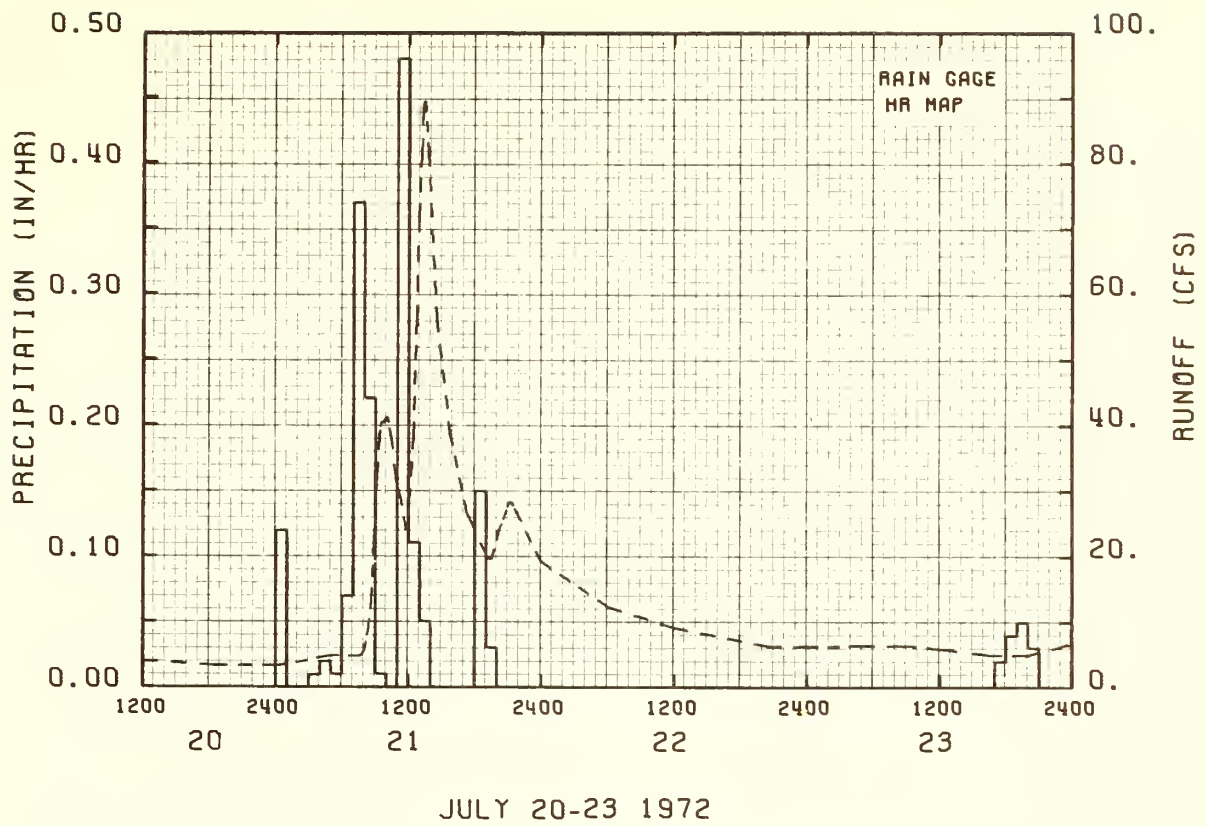


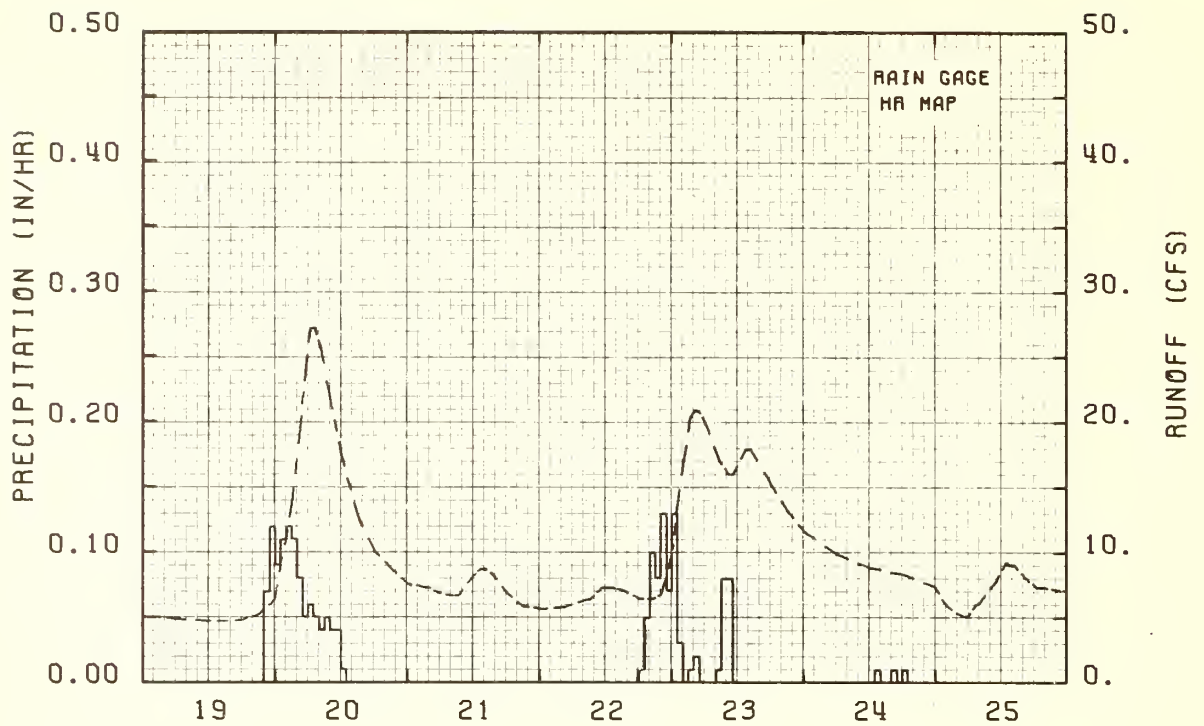
JUNE 27-30 1972

APRIL 30 TO MAY 6 1972

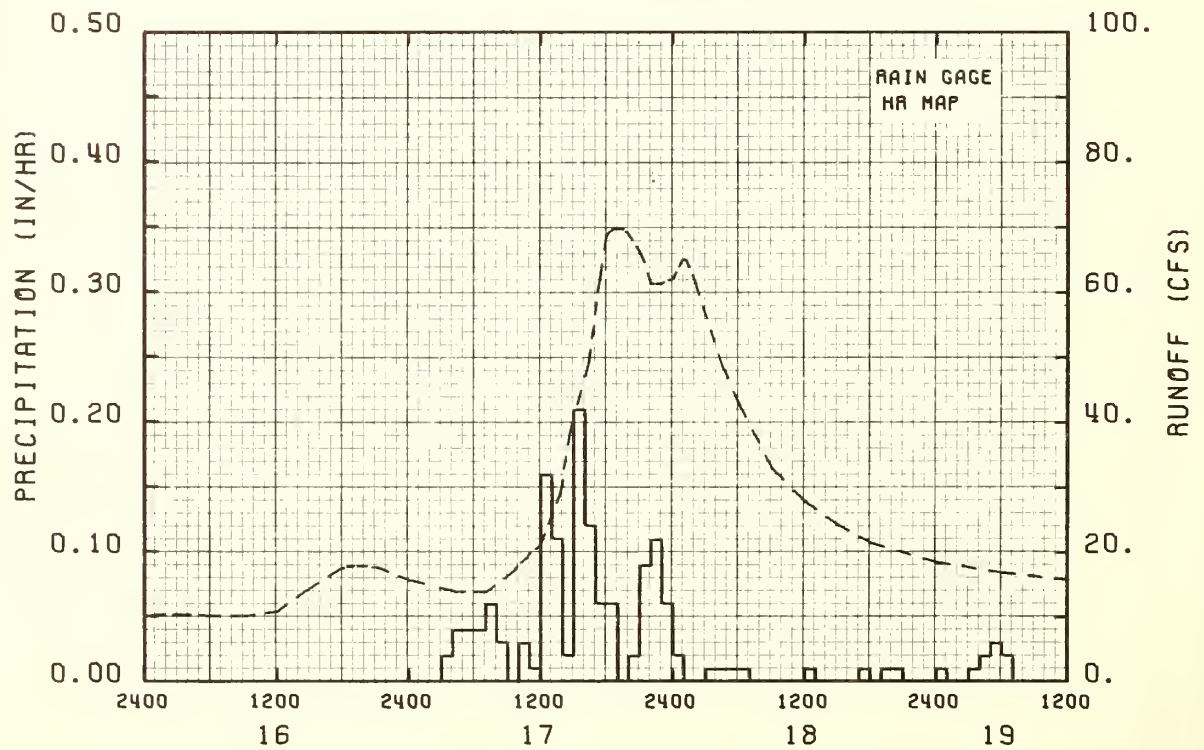






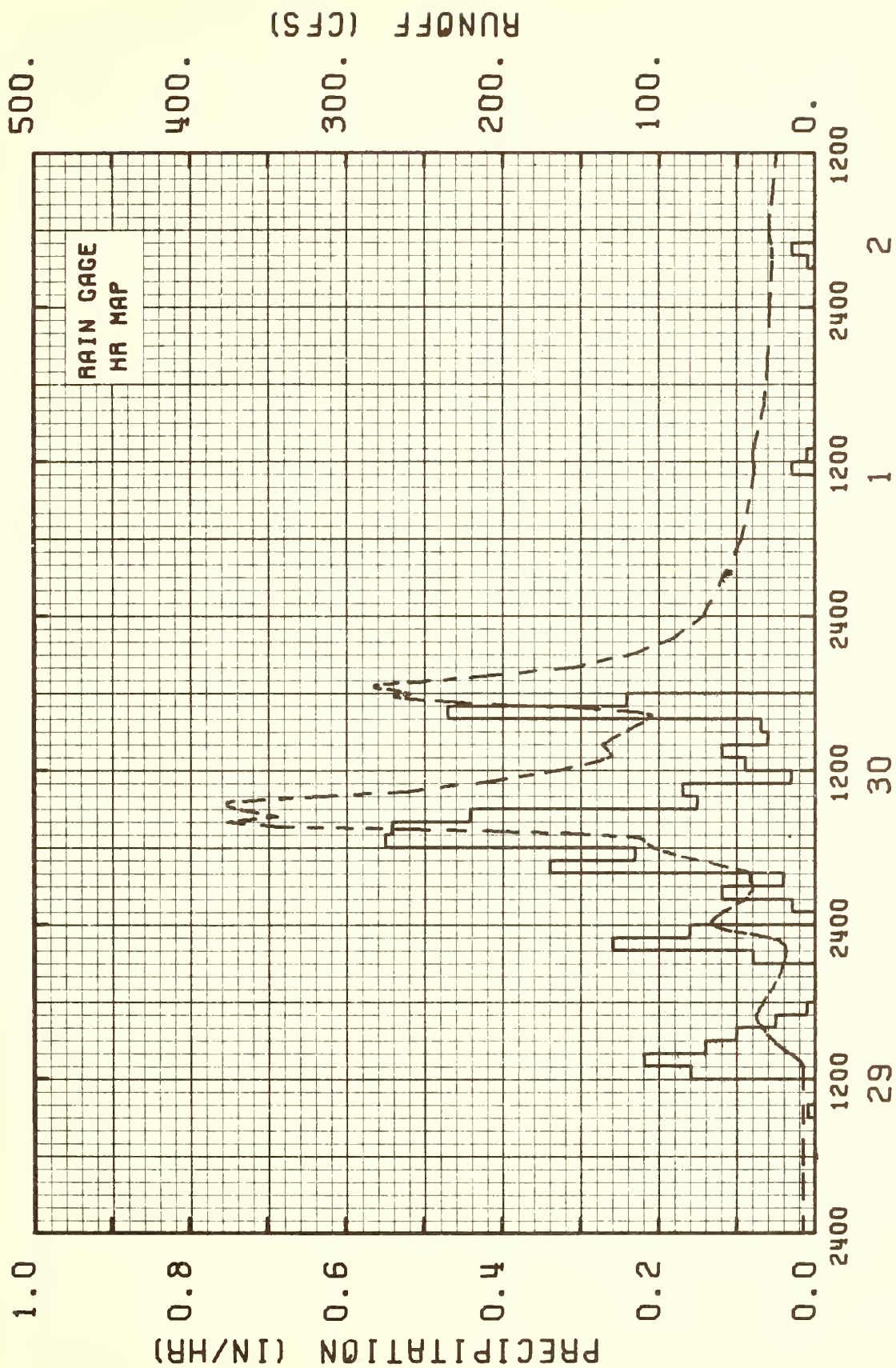


JANUARY 19-25 1973

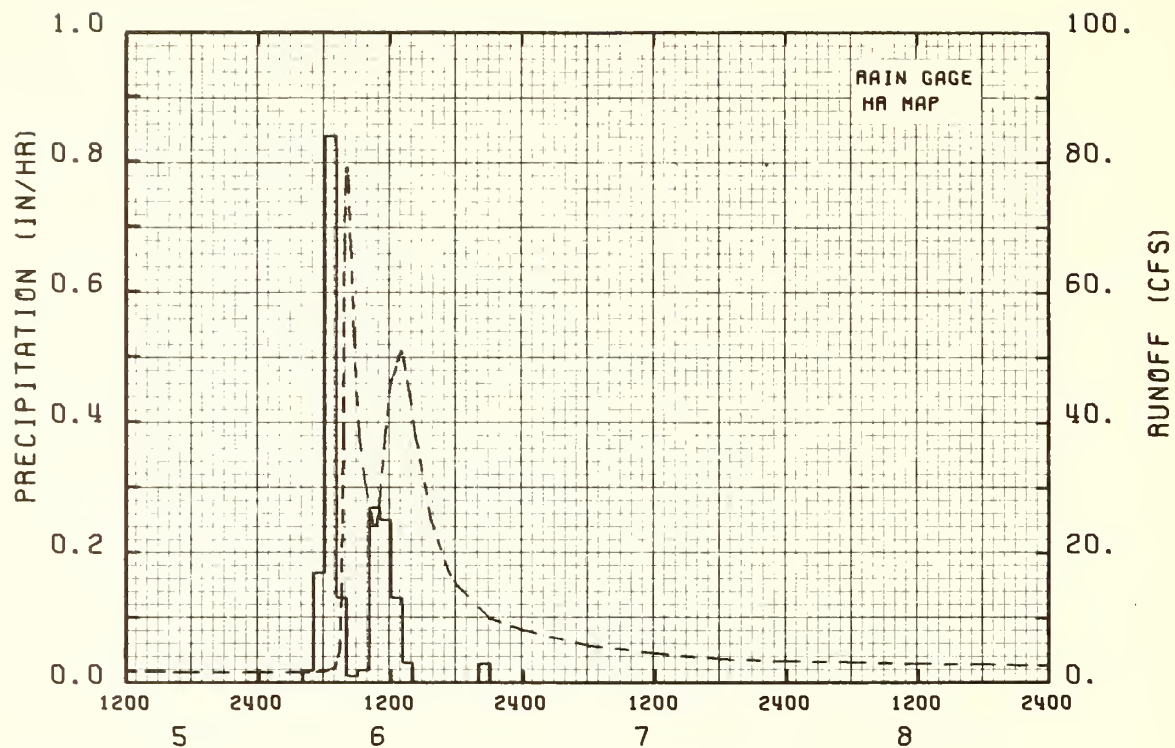


MARCH 16-19 1973

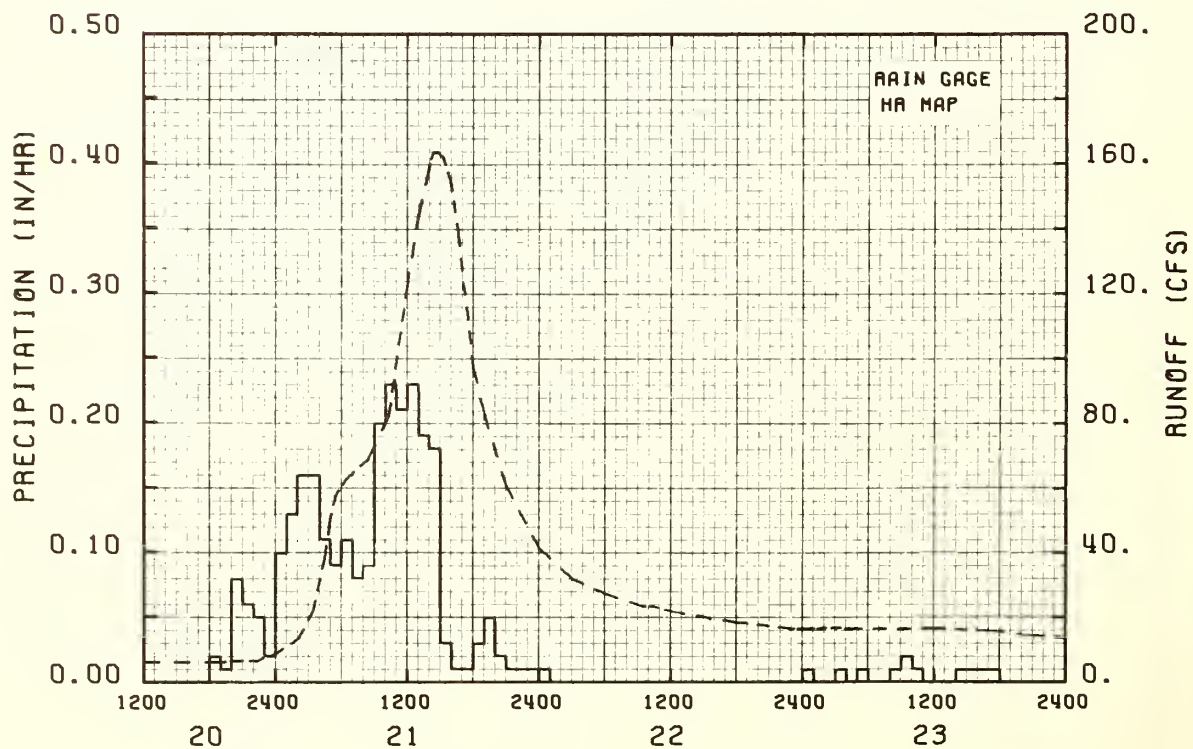




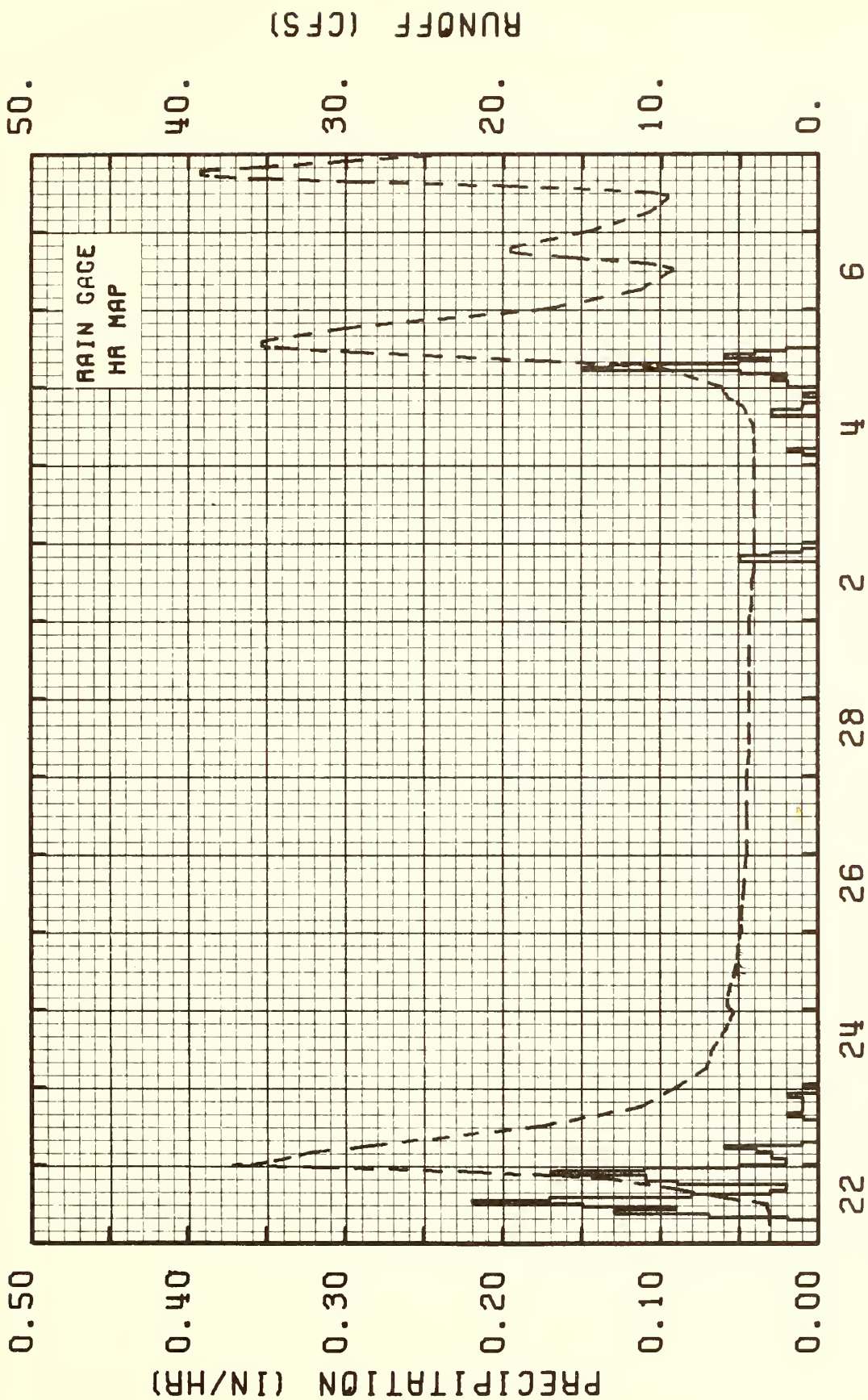
JUNE 29 TO JULY 2 1973



SEPTEMBER 5 -8 1973



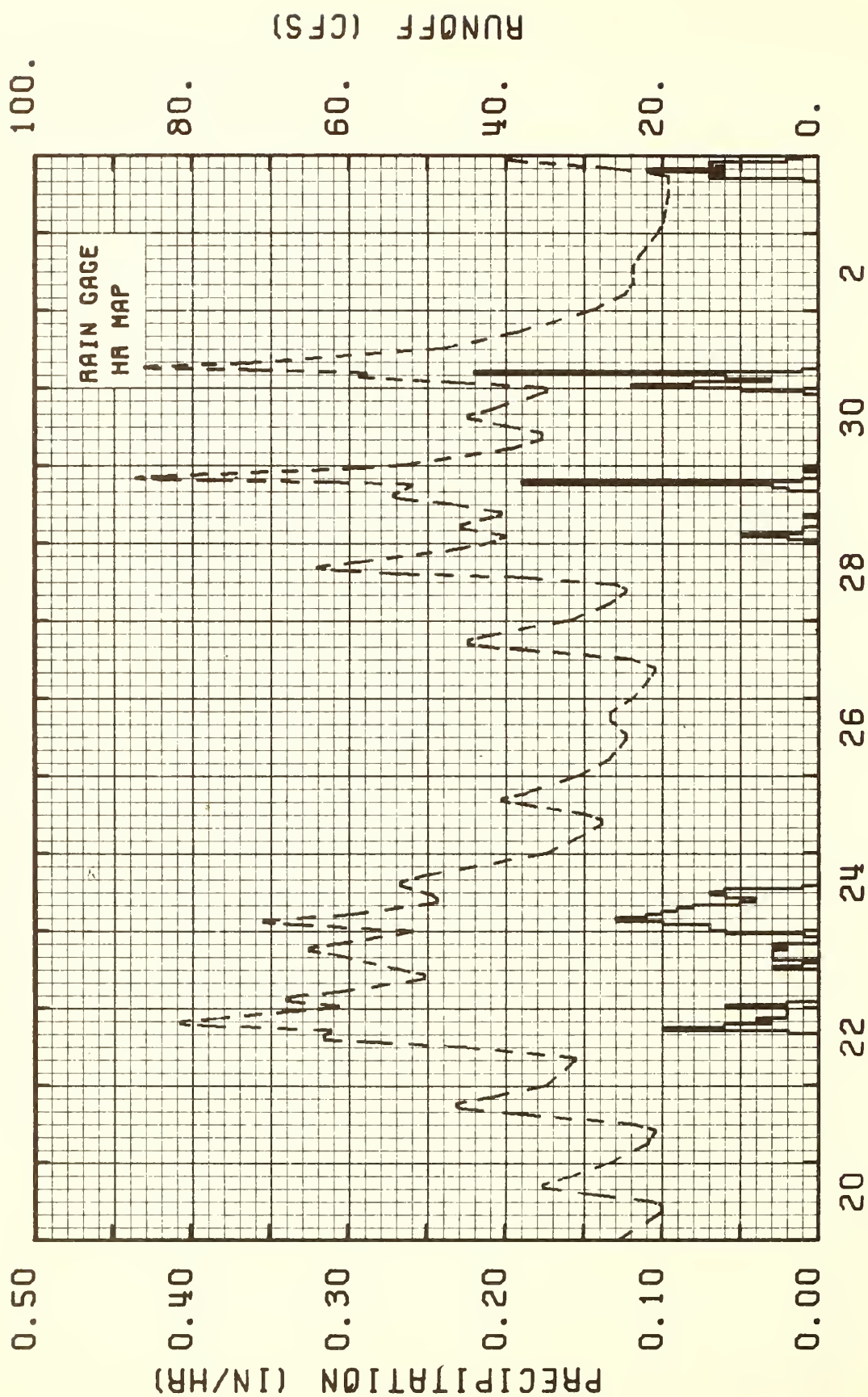
DECEMBER 20-23 1973

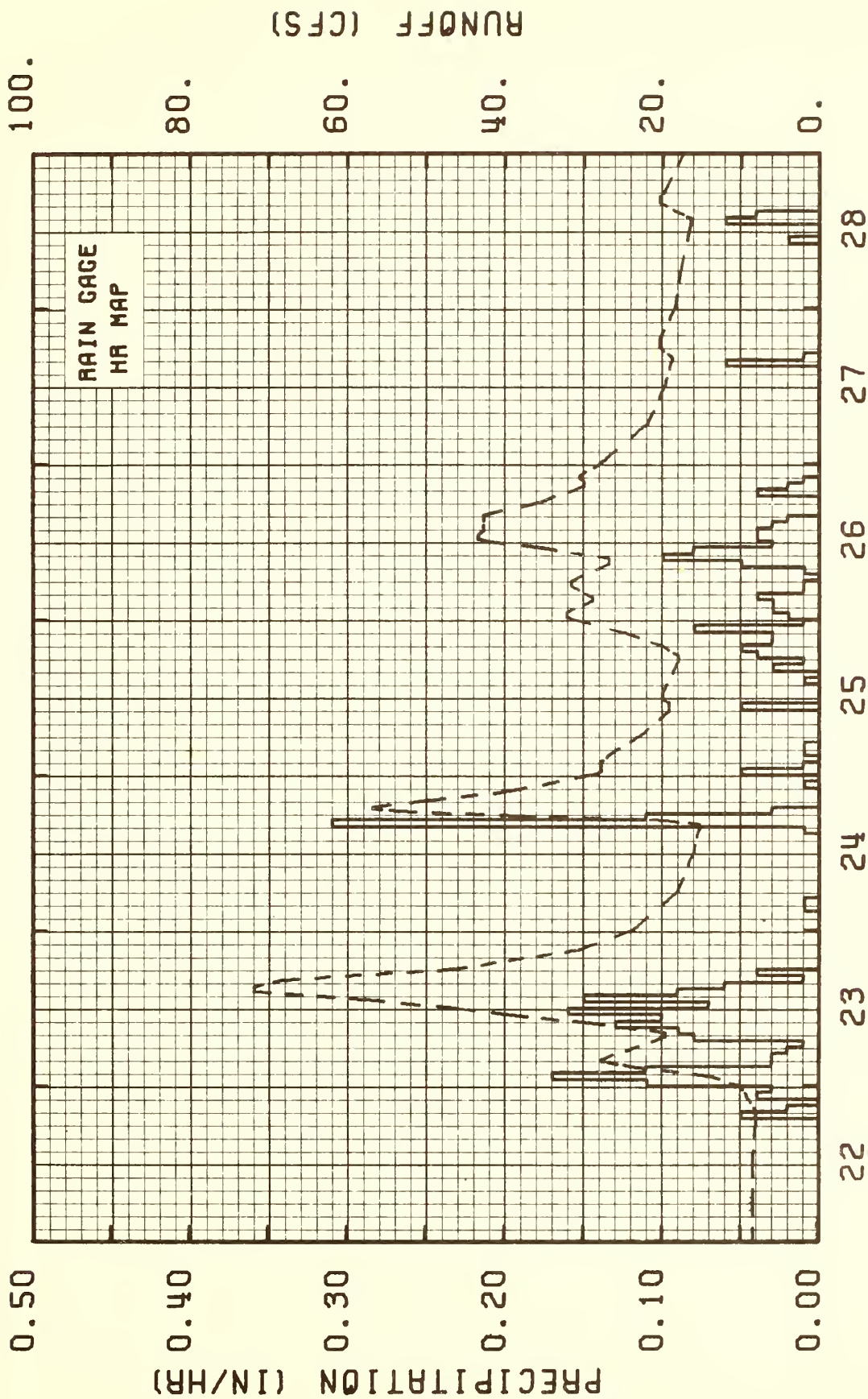


FEBRUARY 22 TO MARCH 7 1974



APRIL 20 10 MAY 3 1974





MAY 22-28 1974





## APPENDIX C

### SNOW COURSE DATA

This appendix contains the tabulation of the snow course data for the W-3 watershed. The average depth and water-equivalent as determined from 5 snow tube samples (10 prior to February 1967) over the snow course area are tabulated. The location of the snow courses is described in chapter III.1. The snow course measurements made at stations R-3, R-1A, R-25, and R-16 are the most reliable. The R-1 snow course was affected by boggy conditions which included water flowing under the snow during snowmelt periods. Considerable drifting frequently occurred at the R-6 snow course site. Both of these snow course sites, R-1 and R-6, are no longer used. Further information on the sampling method and the quality of the snow course data is contained in chapter III.5.

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date      |    | Station | R-1  | Station | R-3  | Station | R-6  |
|-----------|----|---------|------|---------|------|---------|------|
|           |    | Depth   | W.E. | Depth   | W.E. | Depth   | W.E. |
| YEAR 1960 |    |         |      |         |      |         |      |
| January   | 4  | 18.7    | 4.1  | 19.2    | 4.0  | 12.5    | 3.3  |
|           | 11 | 25.3    | 4.9  | 23.9    | 4.2  | 17.5    | 2.8  |
|           | 18 | 22.8    | 5.1  | 23.1    | 5.2  | 16.4    | 3.9  |
|           | 25 | 24.2    | 5.9  | 25.5    | 6.0  | 17.6    | 3.6  |
| February  | 1  | 24.8    | 6.0  | 26.7    | 6.6  | 19.9    | 4.7  |
|           | 8  | 26.0    | 6.4  | 27.8    | 6.9  | 18.5    | 4.5  |
|           | 15 | 25.6    | 6.9  | 28.1    | 7.7  | 16.6    | 4.3  |
|           | 22 | 31.0    | 8.9  | 35.4    | 9.4  | 20.8    | 4.7  |
|           | 29 | 36.2    | 9.4  | 39.6    | 10.0 | 22.2    | 4.9  |
| March     | 2  | 33.9    | 10.7 |         |      |         |      |
|           | 7  |         |      | 34.4    | 10.4 | 20.4    | 5.5  |
|           | 14 | 33.2    | 10.0 | 34.0    | 10.1 | 20.4    | 5.7  |
|           | 20 | 35.5    | 11.3 | 36.8    | 10.8 | 23.6    | 6.5  |
|           | 28 | 33.6    | 11.2 | 34.6    | 11.1 | 22.2    | 6.5  |
| April     | 4  | 15.6    | 6.3  | 21.4    | 8.8  | 8.0     | 3.1  |
|           | 11 | 16.9    | 7.1  | 23.3    | 9.8  | 8.8     | 3.7  |
|           | 18 | 0.0     | 0.0  | 6.6     | 3.6  | 0.0     | 0.0  |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             | <u>Station R-1</u> |      | <u>Station R-3</u> |      | <u>Station R-6</u> |      |
|------------------|--------------------|------|--------------------|------|--------------------|------|
|                  | Depth              | W.E. | Depth              | W.E. | Depth              | W.E. |
| <u>YEAR 1960</u> |                    |      |                    |      |                    |      |
| December 12      | 5.3                | 1.0  | 4.7                | 1.0  | 3.5                | 1.0  |
| 19               | 6.4                | 1.0  | 7.6                | 2.0  | 6.7                | 1.6  |
| 27               | 12.7               | 2.0  | 13.2               | 3.1  | 9.7                | 2.0  |
| <u>YEAR 1961</u> |                    |      |                    |      |                    |      |
| January 3        | 19.5               | 3.0  | 19.5               | 4.1  |                    |      |
| 4                |                    |      |                    |      | 17.6               | 3.7  |
| 9                | 19.8               | 3.4  | 20.2               | 4.5  | 15.0               | 3.8  |
| 16               | 18.4               | 4.2  | 17.8               | 5.0  | 14.0               | 3.8  |
| 23               | 16.0               | 3.1  | 19.1               | 5.1  | 14.0               | 3.3  |
| 30               | 16.4               | 2.7  | 18.8               | 4.8  |                    |      |
| February 3       |                    |      |                    |      | 14.5               | 3.8  |
| 6                | 16.9               | 3.2  | 19.0               | 4.8  | 5.8                | 3.0  |
| 13               | 17.4               | 3.3  | 18.6               | 5.2  | 14.3               | 4.4  |
| 20               | 14.4               | 2.5  | 17.5               | 4.9  | 21.5               | 5.7  |
| 27               | 11.4               | 4.8  | 14.0               | 5.4  | 14.8               | 4.6  |
| March 6          | 10.2               | 4.4  | 14.2               | 6.3  | 5.8                | 3.0  |
| 13               | 16.8               | 4.6  | 20.8               | 6.1  | 14.3               | 4.4  |
| 20               | 24.3               | 6.4  | 25.3               | 6.5  | 21.5               | 5.7  |
| 27               | 17.5               | 5.4  | 18.7               | 5.9  | 14.8               | 4.6  |
| April 3          | 17.2               | 4.5  | 18.6               | 4.9  |                    |      |
| 4                |                    |      |                    |      | 7.3                | 1.8  |
| 10               | 14.7               | 4.0  | 14.6               | 4.6  | 0.0                | 0.0  |
| 17               | 18.9               | 6.3  | 18.7               | 5.7  |                    |      |
| 24               | 12.1               | 4.2  | 11.2               | 3.4  |                    |      |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made



Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

|                  |    | Station | R-1  | Station | R-3  | Station | R-6  |
|------------------|----|---------|------|---------|------|---------|------|
| Date             |    | Depth   | W.E. | Depth   | W.E. | Depth   | W.E. |
| <u>YEAR 1961</u> |    |         |      |         |      |         |      |
| December         | 4  | 7.6     | 2.1  | 4.6     | 1.0  | 0.0     | 0.0  |
|                  | 11 | 7.0     | 2.0  | 5.2     | 2.0  | 0.0     | 0.0  |
|                  | 18 | 7.2     | 1.1  | 6.7     | 1.0  | 0.0     | 0.0  |
|                  | 26 | 12.9    | 2.6  | 12.0    | 2.0  | 7.3     | 1.3  |
| <u>YEAR 1962</u> |    |         |      |         |      |         |      |
| January          | 2  | 17.2    | 3.4  | 16.4    | 3.1  | 7.2     | 1.3  |
|                  | 8  | 15.8    | 4.1  | 15.6    | 3.1  | 8.9     | 1.7  |
|                  | 15 | 16.4    | 3.0  | 16.4    | 4.0  | 7.9     | 1.8  |
|                  | 22 | 14.5    | 3.3  | 14.8    | 3.3  | 5.6     | 1.0  |
|                  | 29 | 13.4    | 3.1  | 14.9    | 2.6  | 5.6     | 1.1  |
| February         | 5  | 17.4    | 3.2  | 20.2    | 4.1  | 8.0     | 1.8  |
|                  | 12 | 16.7    | 3.3  | 19.0    | 3.9  | 8.0     | 1.8  |
|                  | 19 |         |      | 24.1    | 4.2  | 12.8    | 1.7  |
|                  | 26 | 36.8    | 9.4  | 34.0    | 7.3  | 22.6    | 1.4  |
| March            | 5  | 36.1    | 8.7  | 36.8    | 9.6  | 25.5    | 5.6  |
|                  | 12 | 38.9    | 7.5  | 31.4    | 8.5  | 21.4    | 5.9  |
|                  | 19 | 32.9    | 9.5  | 33.6    | 9.5  | 24.5    | 7.2  |
|                  | 26 | 28.4    | 8.8  | 29.0    | 9.1  | 20.4    | 7.2  |
|                  | 29 | 24.5    | 7.7  |         |      |         |      |
| April            | 2  | 21.3    | 7.5  | 18.4    | 6.7  | 6.5     | 3.4  |
|                  | 5  | 20.3    | 7.6  |         |      |         |      |
|                  | 9  | 8.9     | 3.4  | 8.9     | 3.2  |         |      |
|                  | 16 | 12.6    | 2.2  | 8.2     | 1.7  |         |      |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

|           |    | Station | R-1  | Station | R-3  | Station | R-6  |
|-----------|----|---------|------|---------|------|---------|------|
| Date      |    | Depth   | W.E. | Depth   | W.E. | Depth   | W.E. |
| YEAR 1962 |    |         |      |         |      |         |      |
| December  | 10 | 9.9     | 0.7  | 7.2     | 0.7  | 6.3     | 0.2  |
|           | 20 | 7.1     | 0.8  | 5.8     | 1.0  | 5.4     | 0.7  |
|           | 27 | 14.4    | 2.4  | 12.4    | 2.1  |         |      |
|           | 28 |         |      |         |      | 10.6    | 1.9  |
| YEAR 1963 |    |         |      |         |      |         |      |
| January   | 3  | 13.7    | 2.3  | 14.6    | 2.4  |         |      |
|           | 4  |         |      |         |      | 17.9    | 3.6  |
|           | 7  | 14.2    | 3.1  | 13.7    | 2.7  | 16.7    | 3.8  |
|           | 14 | 20.6    | 3.6  | 19.2    | 3.7  | 16.7    | 3.8  |
|           | 21 | 18.9    | 4.0  | 18.3    | 3.9  | 19.4    | 4.9  |
|           | 29 |         |      | 29.9    | 6.4  | 31.7    | 8.2  |
|           | 30 | 27.3    | 5.4  |         |      |         |      |
| February  | 4  | 28.1    | 6.0  | 32.2    | 7.2  | 35.4    | 9.5  |
|           | 11 | 29.9    | 6.4  | 33.8    | 8.3  | 37.4    | 10.3 |
|           | 18 | 37.5    | 10.1 | 35.8    | 9.6  | 37.9    | 11.0 |
|           | 25 | 31.3    | 7.2  | 37.7    | 9.1  | 40.4    | 12.1 |
| March     | 4  | 31.7    | 7.9  | 37.4    | 10.8 | 39.9    | 12.5 |
|           | 11 | 35.2    | 9.2  | 43.5    | 12.3 | 45.0    | 14.1 |
|           | 18 | 40.0    | 11.9 | 45.0    | 13.0 | 46.6    | 15.0 |
|           | 21 | 48.6    | 15.7 | 46.1    | 14.6 |         |      |
|           | 25 | 42.8    | 13.3 | 42.4    | 13.0 | 42.3    | 12.8 |
|           | 27 | 32.1    | 11.6 | 32.7    | 11.5 | 34.0    | 12.9 |
|           | 28 | 31.7    | 11.0 | 30.9    | 10.7 | 32.5    | 10.9 |
|           | 29 | 30.4    | 11.3 | 30.8    | 10.8 | 30.3    | 11.1 |
| April     | 1  | 24.8    | 10.0 | 25.4    | 10.2 | 22.9    | 9.3  |
|           | 3  | 20.4    | 9.3  | 20.9    | 8.1  | 18.6    | 8.6  |
|           | 4  | 19.6    | 8.6  | 20.6    | 8.6  | 18.5    | 8.1  |
|           | 8  | 18.0    | 8.1  | 19.4    | 8.4  | 19.9    | 8.6  |
|           | 10 | 23.2    | 9.8  | 19.9    | 8.1  | 18.1    | 7.7  |
|           | 11 | 25.8    | 9.7  | 20.9    | 7.9  | 19.8    | 7.6  |
|           | 12 | 25.0    | 10.2 | 19.5    | 8.5  | 14.0    | 6.3  |
|           | 15 | 13.8    | 6.6  | 14.5    | 6.8  | 9.6     | 4.3  |
|           | 17 | 11.5    | 5.0  | 10.1    | 4.6  | 5.1     | 2.1  |
|           | 18 | 10.1    | 5.2  | 9.1     | 4.4  | 2.4     | 1.2  |
|           | 19 | 5.7     | 2.7  | 7.8     | 3.3  | 2.2     | 1.0  |
|           | 22 | 0.0     | 0.0  | 0.0     | 0.0  | 0.0     | 0.0  |

W.E. is snow cover water-equivalent

(E) means estimated value

- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             | Station R-1 |      | Station R-3 |      | Station R-6 |      |
|------------------|-------------|------|-------------|------|-------------|------|
|                  | Depth       | W.E. | Depth       | W.E. | Depth       | W.E. |
| <u>YEAR 1963</u> |             |      |             |      |             |      |
| December 2       | 3.4         | 0.3  | 3.0         | 0.3  | 2.4         | -    |
| 9                | 3.8         | 0.4  | 3.4         | 0.3  | 3.0         | -    |
| 16               | 11.8        | 1.2  | 10.2        | 1.1  |             |      |
| 17               |             |      |             |      | 8.1         | 1.6  |
| 23               | 10.1        | 1.8  | 9.0         | 1.5  |             |      |
| 24               |             |      |             |      | 11.5        | 2.5  |
| 30               | 13.8        | 2.4  | 12.8        | 2.0  |             |      |
| 31               |             |      |             |      | 12.5        | 3.0  |
| <u>YEAR 1964</u> |             |      |             |      |             |      |
| January 6        | 17.0        | 3.2  | 14.2        | 2.4  |             |      |
| 10               |             |      |             |      | 20.8        | 4.5  |
| 13               | 23.1        | 5.4  | 20.3        | 3.5  | 21.4        | 4.3  |
| 20               | 21.5        | 4.9  | 19.5        | 4.5  | 21.8        | 5.4  |
| 27               | 21.8        | 4.9  | 17.0        | 3.7  | 17.2        | 4.9  |
| February 3       | 23.9        | 5.2  | 18.9        | 4.7  | 20.6        | 5.9  |
| 10               | 25.9        | 6.0  | 22.8        | 5.5  | 23.4        | 6.5  |
| 17               | 28.8        | 6.8  | 25.6        | 5.6  | 27.9        | 7.5  |
| 24               | 27.8        | 6.7  | 25.4        | 5.9  | 28.5        | 8.3  |
| March 2          | 27.3        | 7.2  | 25.0        | 6.5  | 29.6        | 9.1  |
| 6                | 7.7         | 4.0  | 14.8        | 4.6  | 10.3        | 3.8  |
| 9                | 16.8        | 5.8  | 15.5        | 5.7  | 18.7        | 7.2  |
| 16               | 16.9        | 5.7  | 19.6        | 6.4  | 8.9         | 1.7  |
| 23               | 16.2        | 5.5  | 18.5        | 6.3  | 7.4         | 2.7  |
| 26               | 7.9         | 5.6  | 17.6        | 6.1  | 3.6         | 1.1  |
| 30               | 29.1        | 9.9  | 25.8        | 8.6  |             |      |
| April 6          | 24.0        | 6.6  | 28.6        | 8.6  |             |      |
| 8                | 18.1        | 6.6  | 21.9        | 8.0  | 15.5        | 5.7  |
| 10               | 9.6         | 7.0  | 20.3        | 7.5  | 7.5         | 2.6  |
| 13               | 11.6        | 4.6  | 14.6        | 5.9  | 0.0         | 0.0  |
| 16               | 11.0        | 7.0  | 4.0         | 1.6  | 0.0         | 0.0  |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date      |    | Station R-1 |        | Station R-3 |        | Station R-6 |      |
|-----------|----|-------------|--------|-------------|--------|-------------|------|
|           |    | Depth       | W.E.   | Depth       | W.E.   | Depth       | W.E. |
| YEAR 1964 |    |             |        |             |        |             |      |
| December  | 7  | 10.0        | 1.0    | 9.9         | 0.9    | 10.1        | -    |
|           | 14 | 7.4         | 0.7(E) | 7.3         | 0.9(E) |             |      |
|           | 15 |             |        |             |        | 7.3         | -    |
|           | 21 | 9.2         | 0.9(E) | 9.3         | 1.3(E) | 8.1         | -    |
|           | 28 | 9.8         | 1.0(E) | 9.0         | -      | 9.0         | -    |
| YEAR 1965 |    |             |        |             |        |             |      |
| January   | 4  | 6.8         | 1.0(E) | 7.0         | 1.3    |             |      |
|           | 11 | 5.4         | .8(E)  | 5.7         | 1.1    | 6.6         | -    |
|           | 18 | 9.8         | 1.5    | 9.2         | 1.4    | 4.9         | -    |
|           | 25 | 15.2        | 2.4    | 15.1        | 2.3    | 12.8        | 2.2  |
| February  | 1  | 17.7        | 2.7    | 17.5        | 2.5    | 11.9        | 2.1  |
|           | 8  | 17.4        | 3.4    | 15.8        | 3.2    | 10.9        | 2.7  |
|           | 15 | 19.1        | 4.5    | 17.2        | -      |             |      |
|           | 23 | 23.5        | 5.4(E) | 24.4        | 5.3    | 13.4        | -    |
| March     | 1  | 23.2        | 5.8    | 19.3        | 4.8    | 10.9        | -    |
|           | 5  | 14.4        | 5.1    | 15.6        | 4.6    | 8.8         | 3.2  |
|           | 8  | 11.6        | 3.7    | 10.8        | 3.8    | 5.5         | 1.2  |
|           | 15 | 9.0         | 2.8    | 10.2        | 3.3    | 0.9         | -    |
|           | 22 | 11.0        | 2.9    | 11.7        | 3.4    | 0.0         | 0.0  |
|           | 29 | 14.7        | 3.6    | 18.0        | 4.9    |             |      |
| April     | 5  | 12.3        | 3.5    | 14.8        | 4.6    |             |      |
|           | 12 | 2.9         | -      | 10.4        | 3.6    |             |      |
|           | 19 |             |        | 1.0         | 0.6(E) |             |      |
|           | 25 |             |        | 0.0         | 0.0    |             |      |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

|                  |    | Station | R-1  | Station | R-3    | Station | R-6  |
|------------------|----|---------|------|---------|--------|---------|------|
| Date             |    | Depth   | W.E. | Depth   | W.E.   | Depth   | W.E. |
| <u>YEAR 1965</u> |    |         |      |         |        |         |      |
| November         | 22 | 11.7    | 1.5  | 7.9     | 1.1    | 5.6     | 0.6  |
|                  | 29 | 17.2    | 2.6  | 12.9    | 3.2    | 10.3    | 1.7  |
| December         | 6  | 18.0    | 3.7  | 12.6    | 3.0    | 8.4     | 1.8  |
|                  | 13 |         |      | 14.8    | 3.1    | 10.7    | 2.1  |
|                  | 20 |         |      | 17.7    | 3.6    | 11.8    | -    |
|                  | 21 | 20.6    | 4.2  |         |        |         |      |
|                  | 27 |         |      |         |        | 13.0    | 2.8  |
|                  | 28 | 19.8    | 4.3  | 17.3    | 3.8    |         |      |
|                  |    |         |      |         |        |         |      |
| <u>YEAR 1966</u> |    |         |      |         |        |         |      |
| January          | 3  | 15.9    | 4.1  | 14.9    | 4.0    | 9.2     | 2.5  |
|                  | 10 | 20.0    | 4.8  | 19.2    | 4.6    | 12.5    | 3.4  |
|                  | 17 | 19.6    | 4.3  | 21.8    | 5.4    | 12.8    | 3.1  |
|                  | 25 | 26.1    | 5.6  | 27.0    | 5.6    | 16.8    | 4.1  |
|                  | 31 | 28.0    | 6.1  | 31.3    | 6.7    | 18.6    | 5.2  |
|                  |    |         |      |         |        |         |      |
| February         | 7  | 26.6    | 5.8  | 29.6    | 7.5    | 17.2    | 5.1  |
|                  | 14 | 27.3    | 5.8  | 25.7    | 7.6    |         |      |
|                  | 21 | 21.6    | 5.2  | 27.9    | 7.6    |         |      |
|                  | 28 | 30.2    | 7.4  | 34.1    | 8.0    | 20.0    | 5.5  |
| March            | 7  | 34.7    | 10.2 | 35.9    | 10.9   | 20.0    | 7.4  |
|                  | 14 | 36.0    | 10.8 | 38.8    | 11.1   |         |      |
|                  | 21 | 30.5    | 10.1 | 31.5    | 10.7   | 17.4    | 7.4  |
|                  | 24 | 23.8    | 8.7  |         |        |         |      |
|                  | 25 |         |      | 25.4    | 9.3    |         |      |
|                  | 28 | 24.3    | 8.7  | 26.2    | 9.4    |         |      |
| May              | 4  | 25.9    | 9.7  | 27.0    | 10.4   |         |      |
|                  | 11 | 28.6    | 10.5 | 26.6    | 10.2   | 12.4    | 5.4  |
|                  | 18 | 19.8    | 8.0  | 18.9    | 7.5    | 0.0     | 0.0  |
|                  | 25 | 0.0     | 0.0  | 2.7     | 0.5(E) |         |      |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made



Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

|           |    | Station | R-1    | Station | R-3    | Station | R-6  | Station | R-25 |
|-----------|----|---------|--------|---------|--------|---------|------|---------|------|
| Date      |    | Depth   | W.E.   | Depth   | W.E.   | Depth   | W.E. | Depth   | W.E. |
| YEAR 1966 |    |         |        |         |        |         |      |         |      |
| December  | 5  | 5.7     | 0.6(E) | 4.5     | 0.5    | 4.5     | -    |         |      |
|           | 27 | 10.7    | 1.1(E) | 10.6    | 1.0    |         |      | 10.5    | 1.0  |
| YEAR 1967 |    |         |        |         |        |         |      |         |      |
| January   | 2  | 14.2    | 2.1(E) | 16.5    | 3.0    |         |      |         |      |
|           | 9  | 14.8    | 3.3    | 13.6    | 2.9    | 15.1    | 3.3  | 13.9    | 2.4  |
|           | 16 | 17.4    | 3.6    | 17.1    | 3.6    | 18.0    | 4.8  | 15.0    | 2.8  |
|           | 23 | 13.8    | 3.6    | 13.2    | 3.4    | 16.5    | 5.0  | 12.1    | 3.0  |
|           | 30 |         |        | 14.8    | 3.7(E) |         |      | 14.4    | 3.5  |
|           | 31 | 14.0    | 3.8(E) |         |        | 16.5    | 4.8  |         |      |
| February  | 6  | 15.5    | 4.2    | 17.6    | 4.5    | 12.5    | 3.0  | 16.7    | 3.9  |
|           | 13 | 13.2    | 4.0    | 15.9    | 4.4    | 15.3    | 4.7  | 16.0    | 4.0  |
|           | 20 | 13.1    | 4.3    | 16.0    | 4.7    | 14.2    | 3.8  | 14.5    | 4.0  |
|           | 22 |         |        |         |        | 16.5    | 5.0  |         |      |
|           | 27 | 18.1    | 5.2    | 23.4    | 5.8    |         |      | 20.5    | 5.3  |
| March     | 3  |         |        |         |        | 33.5    | 8.5  |         |      |
|           | 6  | 20.5    | 5.3    | 24.6    | 6.1    | 35.9    | 8.5  | 22.2    | 5.7  |
|           | 13 | 17.8    | 5.5    | 19.9    | 5.6    | 32.7    | 8.8  | 19.0    | 5.7  |
|           | 20 | 16.0    | 5.2    | 20.5    | 6.2    | 31.9    | 9.3  | 17.4    | 5.4  |
|           | 24 | 15.7    | 5.1    | 20.4    | 6.1    | 31.3    | 10.0 |         |      |
|           | 27 | 15.9    | 5.6    | 17.2    | 4.9    | 31.4    | 8.9  | 14.0    | 5.1  |
|           | 28 | 13.8    | 5.6    | 14.4    | 5.5    | 30.5    | 8.8  | 5.7     | 2.0  |
|           | 29 | 13.6    | 4.7    | 13.4    | 4.8    | 29.2    | 8.9  | 9.9     | 3.8  |
|           | 30 | 11.8    | 4.8    | 12.2    | 4.6    | 28.7    | 8.9  | 9.5     | 3.3  |
|           | 31 | 11.0    | 4.5    | 11.4    | 4.4    | 28.4    | 8.5  | 8.2     | 2.8  |
| April     | 1  | 9.6     | 4.1    | 9.6     | 3.9    | 27.7    | 8.7  | 3.0     | 1.0  |
|           | 2  | 3.1     | 1.2(E) | 5.7     | 3.0(E) | 24.3    | 8.2  | 2.2     | -    |
|           | 3  |         |        | 2.2     | 0.9    | 20.2    | 6.8  | 0.0     | 0.0  |
|           | 4  | 0.6     | -      | 1.9     | 0.8    | 19.2    | 4.4  |         |      |
|           | 5  | 0.7     | -      | 2.0     | 0.4    | 18.5    | 7.2  |         |      |
|           | 6  |         |        | 0.0     | 0.0    | 19.5    | 8.0  |         |      |
|           | 7  |         |        |         |        | 20.3    | 7.1  |         |      |
|           | 8  |         |        | 7.0     | 1.0    | 21.0    | 6.6  |         |      |
|           | 9  |         |        |         |        | 17.2    | 6.9  |         |      |
|           | 10 |         |        | 0.0     | 0.0    | 18.1    | 6.9  |         |      |
|           | 11 |         |        |         |        | 16.1    | 6.5  |         |      |
|           | 12 |         |        |         |        | 15.7    | 6.0  |         |      |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             | <u>Station R-1</u> |      | <u>Station R-3</u> |      | <u>Station R-6</u> |      | <u>Station R-25</u> |      |
|------------------|--------------------|------|--------------------|------|--------------------|------|---------------------|------|
|                  | Depth              | W.E. | Depth              | W.E. | Depth              | W.E. | Depth               | W.E. |
| <u>YEAR 1967</u> |                    |      |                    |      |                    |      |                     |      |
| April            | 13                 |      |                    |      | 15.5               | 5.6  |                     |      |
|                  | 14                 |      |                    |      | 12.5               | 4.3  |                     |      |
|                  | 15                 |      |                    |      |                    |      |                     |      |
|                  | 16                 |      |                    |      |                    |      |                     |      |
|                  | 17                 |      |                    |      | 11.6               | 4.1  |                     |      |
|                  | 18                 |      |                    |      | 12.9               | 4.6  |                     |      |
|                  | 19                 |      |                    |      |                    |      |                     |      |
|                  | 20                 |      |                    |      | 11.2               | 4.3  |                     |      |
|                  | 21                 |      |                    |      | 9.3                | 3.4  |                     |      |
|                  | 22                 |      |                    |      |                    |      |                     |      |
|                  | 23                 |      |                    |      |                    |      |                     |      |
|                  | 24                 |      |                    |      | 5.6                | 1.7  |                     |      |
|                  | 25                 |      |                    |      | 2.4                | 0.7  |                     |      |
|                  | 26                 |      |                    |      | 0.0                | 0.0  |                     |      |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

|           |      | Station | R-1    | Station | R-3  | Station | R-6  | Station | R-25 |
|-----------|------|---------|--------|---------|------|---------|------|---------|------|
| Date      |      | Depth   | W.E.   | Depth   | W.E. | Depth   | W.E. | Depth   | W.E. |
| YEAR 1967 |      |         |        |         |      |         |      |         |      |
| November  | 20   | 7.9     | 0.9    | 12.5    | 1.6  | 10.3    | 1.5  |         |      |
|           | 27   | 6.8     | 1.2    | 8.7     | 1.7  | 8.2     | 2.3  |         |      |
| December  | 4    | 10.0    | 1.8    | 10.6    | 2.0  | 11.2    | 2.7  |         |      |
|           | 5    |         |        |         |      |         |      | 5.3     | -    |
|           | 11   |         |        | 11.9    | 2.6  | 13.0    | 2.8  | 6.8     | -    |
|           | 12   | 11.1    | 2.3    |         |      |         |      |         |      |
|           | 18   | 7.6     | 1.7    | 8.3     | 2.1  | 12.8    | 3.4  | 4.1     | -    |
|           | 21   |         |        |         |      |         |      | 2.0     | -    |
|           | 26   |         |        | 8.4     | 2.0  | 10.7    | 2.4  |         |      |
|           | 27   | 5.9     | 1.2(E) |         |      |         |      |         |      |
| YEAR 1968 |      |         |        |         |      |         |      |         |      |
| January   | 2    | 14.9    | 3.1    | 16.4    | 3.5  | 24.3    | 5.5  | 13.5    | 1.6  |
|           | 8    |         |        | 16.2    | 3.9  | 32.7    | 8.3  | 16.0    | 2.5  |
|           | 9    | 10.3    | 2.4    |         |      |         |      |         |      |
|           | 15   | 11.0    | 2.7    | 16.1    | 3.9  | 31.1    | 8.8  | 14.0    | 2.3  |
|           | 22   |         |        | 17.8    | 4.4  | 32.0    | 9.3  | 15.7    | 2.9  |
|           | 26   | 14.8    | 3.1    |         |      |         |      |         |      |
|           | 29   | 16.6    | 2.9    | 22.9    | 4.6  | 34.8    | 9.8  | 18.5    | 3.4  |
| February  | 5    | 16.5    | 3.1    | 21.3    | 4.3  | 32.1    | 10.3 |         |      |
|           | 7    |         |        |         |      |         |      | 18.2    | 3.7  |
|           | 12   | 18.0    | 4.0    | 23.0    | 4.9  | 37.0    | 10.8 |         |      |
|           | 14   |         |        |         |      |         |      | 18.9    | 4.2  |
|           | 19   | 19.7    | 4.4    | 26.3    | 6.3  | 41.3    | 12.6 |         |      |
|           | 21   |         |        |         |      |         |      | 21.3    | 4.5  |
|           | 26   | 20.3    | 4.7    | 26.6    | 6.0  | 40.0    | 12.3 |         |      |
| March     | 29   |         |        |         |      |         |      | 21.3    | 4.9  |
|           | 4    | 22.5    | 5.2    | 28.2    | 6.7  | 49.3    | 14.8 |         |      |
|           | 5    |         |        |         |      |         |      | 23.8    | 5.6  |
|           | 11   | 21.6    | 5.9    | 26.4    | 7.0  | 46.0    | 15.4 | 19.8    | 4.6  |
|           | 18   |         |        | 26.2    | 8.4  | 43.2    | 15.6 | 18.0    | 5.6  |
|           | 19   | 19.3    | 5.6    | 24.7    | 7.7  | 41.5    | 15.2 | 14.1    | 4.7  |
|           | 20   | 14.2    | 5.0    | 20.2    | 6.5  | 37.0    | 13.2 | 12.0    | 4.2  |
| 21        | 11.1 | 4.0     | 18.1   | 6.4     | 35.1 | 12.5    | 11.2 | 3.9     |      |
| 22        | 8.7  | 3.2     | 15.0   | 5.1     | 33.2 | 12.8    |      |         |      |
| 25        | 8.3  | 3.1     | 17.7   | 5.7     | 34.6 | 13.1    | 9.5  | 2.9     |      |

W.E. is snow cover water-equivalent

(E) means estimated value

- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             |    | Station R-1 |      | Station R-3 |      | Station R-6 |      | Station R-25 |      |
|------------------|----|-------------|------|-------------|------|-------------|------|--------------|------|
|                  |    | Depth       | W.E. | Depth       | W.E. | Depth       | W.E. | Depth        | W.E. |
| <u>YEAR 1968</u> |    |             |      |             |      |             |      |              |      |
| March            | 26 | 6.8         | 2.3  | 16.5        | 5.7  | 33.6        | 13.6 | 8.6          | 2.6  |
|                  | 27 | 6.3         | 1.8  | 14.6        | 5.7  | 31.8        | 13.0 | 6.3          | 2.0  |
|                  | 28 | 4.3         | 1.0  | 13.2        | 5.1  | 29.8        | 13.1 | 5.2          | 1.2  |
|                  | 29 | 2.4         | 0.4  | 12.9        | 4.9  | 28.9        | 12.2 | 5.0          | 1.3  |
| April            | 1  | 0.0         | 0.0  | 6.3         | 2.3  | 20.8        | 9.1  | 0.0          | 0.0  |
|                  | 3  |             |      | 6.8         | 2.4  | 18.3        | 8.1  |              |      |
|                  | 4  |             |      | 6.0         | 2.0  | 16.9        | 7.0  |              |      |
|                  | 5  |             |      | 0.0         | 0.0  | 12.8        | 5.5  |              |      |
|                  | 8  |             |      |             |      | 7.7         | 3.0  |              |      |
|                  | 9  |             |      |             |      | 4.8         | 1.5  |              |      |
|                  | 10 |             |      |             |      | 1.9         | 0.6  |              |      |
|                  | 11 |             |      |             |      | 1.3         | 0.5  |              |      |

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- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

|           |    | Station | R-1  | Station | R-3  | Station | R-6  | Station | R-25 |
|-----------|----|---------|------|---------|------|---------|------|---------|------|
| Date      |    | Depth   | W.E. | Depth   | W.E. | Depth   | W.E. | Depth   | W.E. |
| YEAR 1968 |    |         |      |         |      |         |      |         |      |
| November  | 18 | 10.5    | 1.7  | 10.4    | 1.4  | 9.2     | 1.7  | 5.7     | 1.0  |
|           | 25 | 8.3     | 1.8  | 8.6     | 2.3  | 9.5     | 2.3  | 3.6     | .9   |
| December  | 2  | 6.4     | 1.6  | 7.8     | 2.3  | 9.4     | 2.5  | 5.0     | 1.4  |
|           | 9  | 16.6    | 4.0  |         |      | 20.7    | 4.8  |         |      |
|           | 10 |         |      |         |      |         |      | 11.7    | 2.7  |
|           | 11 |         |      | 18.1    | 4.5  |         |      |         |      |
|           | 16 | 20.6    | 4.6  | 20.2    | 4.8  | 33.2    | 7.4  | 15.4    | 3.1  |
|           | 23 | 25.7    | 5.7  | 27.9    | 6.3  | 39.4    | 9.3  |         |      |
|           | 27 |         |      |         |      |         |      | 20.5    | 4.3  |
|           | 30 | 29.6    | 7.1  | 31.2    | 7.0  | 30.8    | 10.5 |         |      |
|           | 31 |         |      |         |      |         |      | 24.7    | 5.3  |
| YEAR 1969 |    |         |      |         |      |         |      |         |      |
| January   | 6  | 27.5    | 6.4  | 28.3    | 5.9  | 41.3    | 11.0 |         |      |
|           | 7  |         |      |         |      |         |      | 32.0    | 5.5  |
|           | 13 | 37.6    | 8.3  | 39.8    | 8.5  | 50.0    | 13.1 |         |      |
|           | 14 |         |      |         |      |         |      | 30.7    | 5.6  |
|           | 20 | 32.6    | 8.6  | 34.9    | 9.3  | 46.0    | 13.8 | 27.3    | 6.5  |
|           | 27 | 30.0    | 8.4  | 29.8    | 7.4  | 41.6    | 13.2 | 23.7    | 5.9  |
| February  | 1  | 31.8    | 8.4  | 33.3    | 7.6  | 43.9    | 13.5 | 26.8    | 6.8  |
|           | 11 | 40.2    | 10.0 | 41.3    | 9.5  | 65.9    | 15.3 | 34.2    | 8.2  |
|           | 17 | 39.6    | 10.5 | 39.1    | 10.5 | 60.3    | 19.4 | 32.4    | 8.2  |
|           | 24 |         |      |         |      | 57.9    | 19.2 | 29.0    | 8.0  |
|           | 28 | 50.0    | 11.6 | 50.6    | 11.3 |         |      | 38.2    | 9.8  |
| March     | 4  |         |      |         |      |         |      | 38.2    | 9.8  |
|           | 6  |         |      |         |      | 67.2    | 22.8 |         |      |
|           | 7  | 45.0    | 12.6 | 45.8    | 12.3 |         |      |         |      |
|           | 11 |         |      |         |      |         |      | 36.7    | 9.3  |
|           | 13 | 45.0    | 12.1 | 45.6    | 13.2 | 68.6    | 23.3 |         |      |
|           | 17 | 45.3    | 12.5 | 45.7    | 12.8 | 67.7    | 23.7 | 33.5    | 8.9  |
|           | 19 | 43.7    | 12.3 | 43.5    | 11.8 | 66.7    | 23.9 | 33.6    | 8.6  |
|           | 20 | 45.1    | 12.9 | 45.6    | 14.0 | 65.3    | 22.6 | 34.9    | 7.8  |
|           | 24 | 43.1    | 13.0 | 43.2    | 12.9 | 62.2    | 23.8 | 28.4    | 5.8  |
|           | 25 | 43.7    | 13.4 | 45.4    | 13.8 | 62.3    | 22.8 | 27.8    | 6.4  |
|           | 26 | 45.4    | 14.1 | 42.9    | 13.7 | 60.0    | 23.4 | 26.6    | 8.4  |
|           | 27 | 45.6    | 13.8 | 43.8    | 12.7 | 59.2    | 22.8 | 25.9    | 6.9  |
|           | 28 | 44.6    | 13.8 | 42.7    | 13.9 | 58.4    | 24.0 | 25.2    | 7.7  |
|           | 31 | 45.8    | 13.9 | 44.1    | 14.7 | 58.0    | 22.3 | 24.7    | 8.0  |

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Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             |    | Station R-1 |      | Station R-3 |      | Station R-6 |      | Station R-25 |      |
|------------------|----|-------------|------|-------------|------|-------------|------|--------------|------|
|                  |    | Depth       | W.E. | Depth       | W.E. | Depth       | W.E. | Depth        | W.E. |
| <u>YEAR 1969</u> |    |             |      |             |      |             |      |              |      |
| April            | 1  | 44.8        | 14.6 | 42.9        | 14.9 | 57.0        | 24.1 | 24.0         | 8.6  |
|                  | 2  |             |      |             |      |             |      | 27.9         | 10.1 |
|                  | 3  | 48.7        | 15.1 | 46.9        | 15.0 | 59.3        | 22.8 | 25.6         | 9.4  |
|                  | 4  | 47.8        | 14.8 | 46.1        | 14.9 | 58.4        | 23.7 | 24.6         | 9.3  |
|                  | 7  | 39.5        | 13.5 | 37.5        | 13.6 | 51.0        | 22.8 | 20.5         | 8.0  |
|                  | 8  | 38.3        | 12.3 | 36.7        | 12.5 | 49.5        | 22.2 | 17.8         | 6.7  |
|                  | 9  | 37.9        | 12.9 | 34.5        | 11.5 | 49.1        | 21.8 | 16.5         | 5.9  |
|                  | 10 | 32.5        | 11.5 | 32.6        | 11.2 | 45.7        | 21.1 | 14.2         | 5.0  |
|                  | 11 | 30.7        | 9.4  | 30.0        | 10.5 | 43.4        | 20.1 | 13.0         | 4.3  |
|                  | 14 | 23.2        | 8.4  | 24.4        | 8.4  | 36.7        | 18.9 | 8.3          | 2.9  |
|                  | 15 | 21.8        | 7.4  | 23.4        | 7.2  | 35.4        | 16.9 | 4.8          | 1.7  |
|                  | 16 | 18.4        | 7.3  | 20.1        | 7.1  | 33.3        | 15.8 | 0.0          | 0.0  |
|                  | 17 | 13.8        | 5.7  | 18.2        | 6.4  | 30.4        | 14.8 |              |      |
|                  | 18 | 11.8        | 4.4  | 16.2        | 5.7  | 28.8        | 14.2 |              |      |
|                  | 21 | 9.4         | 3.5  | 16.8        | 6.7  | 27.0        | 12.6 |              |      |
|                  | 22 | 9.0         | 3.3  | 16.2        | 6.2  | 25.7        | 12.0 |              |      |
|                  | 23 | 9.0         | 3.5  | 14.1        | 5.3  | 24.4        | 11.8 |              |      |
|                  | 24 | 8.3         | 3.1  | 13.7        | 5.5  | 22.9        | 10.7 |              |      |
|                  | 25 | 8.3         | 3.3  | 13.3        | 5.4  | 22.3        | 10.4 |              |      |
|                  | 28 | 0.0         | 0.0  | 7.4         | 2.7  | 13.9        | 6.6  |              |      |
|                  | 29 |             |      | 3.2         | 1.1  | 9.5         | 4.2  |              |      |
|                  | 30 |             |      | 2.4         | 0.9  | 6.5         | 2.8  |              |      |
| May              | 1  |             |      |             |      | 4.5         | 2.0  |              |      |
|                  | 2  |             |      |             |      | 2.4         | 0.9  |              |      |

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Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             | Station R-1A |      | Station R-3 |      | Station R-25 |      |
|------------------|--------------|------|-------------|------|--------------|------|
|                  | Depth        | W.E. | Depth       | W.E. | Depth        | W.E. |
| <u>YEAR 1969</u> |              |      |             |      |              |      |
| December 23      |              |      |             |      | 13.9         | 1.4  |
| 24               | 17.5         | 2.2  | 17.2        | 2.3  |              |      |
| 30               |              |      |             |      | 16.9         | 3.5  |
| 31               | 26.4         | 5.7  | 22.2        | 4.9  |              |      |
| <u>YEAR 1970</u> |              |      |             |      |              |      |
| January 6        |              |      |             |      | 15.4         | 3.1  |
| 7                | 23.9         | 5.2  | 20.4        | 5.1  |              |      |
| 13               |              |      |             |      | 16.0         | 3.0  |
| 14               | 25.2         | 5.2  | 20.3        | 5.1  |              |      |
| 20               |              |      |             |      | 15.7         | 3.1  |
| 21               | 25.1         | 5.3  | 21.4        | 5.2  |              |      |
| 27               |              |      |             |      | 19.0         | 3.7  |
| 28               | 27.4         | 6.0  | 23.7        | 5.7  |              |      |
| February 3       |              |      |             |      | 13.8         | 3.5  |
| 5                | 27.1         | 6.4  | 19.9        | 5.8  |              |      |
| 10               |              |      |             |      | 14.3         | 3.7  |
| 12               | 28.5         | 6.6  | 20.8        | 6.2  |              |      |
| 17               |              |      |             |      | 16.9         | 4.4  |
| 18               | 30.8         | 7.7  |             |      |              |      |
| 19               |              |      | 23.2        | 7.3  |              |      |
| 24               |              |      | 22.0        | 7.0  |              |      |
| 25               |              |      |             |      | 20.2         | 4.8  |
| 26               | 35.1         | 8.1  |             |      |              |      |
| March 2          |              |      | 25.9        | 7.5  |              |      |
| 3                |              |      |             |      | 18.6         | 4.9  |
| 4                | 33.7         | 8.9  |             |      |              |      |
| 9                |              |      | 25.8        | 7.8  |              |      |
| 10               |              |      |             |      | 19.4         | 6.1  |
| 11               | 36.3         | 9.2  |             |      |              |      |
| 16               |              |      | 28.3        | 8.1  |              |      |
| 17               |              |      |             |      | 21.4         | 5.4  |
| 18               | 36.9         | 10.1 |             |      |              |      |
| 23               | 38.6         | 10.6 | 29.4        | 8.7  | 18.4         | 5.5  |
| 24               | 39.9         | 10.6 | 29.1        | 9.0  | 19.4         | 5.0  |
| 25               | 41.4         | 11.1 | 29.0        | 9.5  | 19.1         | 4.1  |
| 26               | 40.3         | 11.0 | 28.1        | 9.6  | 17.2         | 4.0  |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             |    | Station R-1A |      | Station R-3 |      | Station R-25 |      |
|------------------|----|--------------|------|-------------|------|--------------|------|
|                  |    | Depth        | W.E. | Depth       | W.E. | Depth        | W.E. |
| <u>YEAR 1970</u> |    |              |      |             |      |              |      |
| March            | 27 | 39.4         | 11.0 | 27.4        | 9.8  | 16.6         | 5.5  |
|                  | 30 | 39.8         | 11.3 | 31.8        | 10.1 | 16.8         | 4.9  |
|                  | 31 | 39.5         | 11.5 | 27.7        | 9.4  | 16.5         | 5.2  |
| April            | 1  | 38.1         | 11.8 | 27.7        | 9.9  | 16.4         | 5.0  |
|                  | 2  | 44.2         | 12.5 | 34.5        | 10.7 | 18.0         | 5.6  |
|                  | 3  | 47.4         | 13.0 | 38.5        | 11.8 | 21.8         | 6.4  |
|                  | 6  | 42.6         | 13.1 | 33.5        | 11.7 | 18.9         | 6.1  |
|                  | 7  | 42.2         | 12.6 | 32.8        | 11.4 | 18.5         | 6.2  |
|                  | 8  | 41.0         | 12.7 | 32.5        | 11.3 | 16.6         | 6.1  |
|                  | 9  | 38.4         | 12.2 | 27.0        | 10.4 | 13.9         | 5.0  |
|                  | 10 | 36.7         | 11.7 | 26.7        | 9.9  | 12.6         | 4.1  |
|                  | 13 | 33.3         | 10.9 | 24.4        | 8.9  | 9.8          | 2.9  |
|                  | 14 | 31.4         | 10.4 | 22.7        | 8.7  |              |      |
|                  | 15 | 30.5         | 10.4 | 20.7        | 7.6  | 5.8          | 1.9  |
|                  | 16 | 26.9         | 9.7  | 19.0        | 7.2  | 0.0          | 0.0  |
|                  | 17 | 26.2         | 9.7  | 17.5        | 6.7  |              |      |
|                  | 20 | 21.8         | 7.6  | 12.6        | 4.6  |              |      |
|                  | 21 | 21.6         | 8.0  | 12.3        | 4.7  |              |      |
|                  | 22 | 20.4         | 7.4  | 11.7        | 4.5  |              |      |
|                  | 23 | 19.6         | 7.1  | 10.4        | 3.7  |              |      |
|                  | 24 | 17.4         | 6.6  | 9.1         | 3.2  |              |      |
|                  | 27 | 9.6          | 5.5  | 0.0         | 0.0  |              |      |
|                  | 28 | 7.4          | 2.8  |             |      |              |      |
|                  | 29 | 0.0          | 0.0  |             |      |              |      |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             | Station R-1A |      | Station R-3 |      | Station R-25 |      |
|------------------|--------------|------|-------------|------|--------------|------|
|                  | Depth        | W.E. | Depth       | W.E. | Depth        | W.E. |
| <u>YEAR 1970</u> |              |      |             |      |              |      |
| December         | 8            |      |             |      | 8.6          | 1.4  |
|                  | 9            | 13.9 | 2.0         |      |              |      |
|                  | 10           |      | 17.2        | 2.8  |              |      |
|                  | 15           |      |             |      | 15.0         | 2.4  |
|                  | 16           | 16.8 | 3.0         |      |              |      |
|                  | 18           |      | 21.6        | 3.7  |              |      |
|                  | 22           |      |             |      | 15.7         | 2.6  |
|                  | 23           |      | 27.5        | 4.3  |              |      |
|                  | 24           | 31.6 | 4.7         |      |              |      |
|                  | 29           |      |             |      | 20.0         | 3.5  |
|                  | 30           | 26.4 | 5.1         | 25.2 | 5.2          |      |
| <u>YEAR 1971</u> |              |      |             |      |              |      |
| January          | 5            |      |             |      | 16.4         | 3.7  |
|                  | 6            | 21.6 | 5.2         |      |              |      |
|                  | 7            |      | 24.2        | 5.3  |              |      |
|                  | 12           |      |             |      | 20.2         | 3.6  |
|                  | 13           | 25.6 | 5.2         |      |              |      |
|                  | 14           |      | 24.9        | 5.4  |              |      |
|                  | 19           |      |             |      | 18.9         | 3.7  |
|                  | 20           | 24.5 | 5.5         |      |              |      |
|                  | 21           |      | 22.6        | 5.5  |              |      |
|                  | 26           |      |             |      | 22.4         | 4.4  |
|                  | 29           | 37.1 | 7.7         | 34.7 | 7.1          |      |
| February         | 2            |      |             |      | 29.8         | 5.5  |
|                  | 4            | 37.0 | 8.0         | 36.3 | 7.9          |      |
|                  | 9            |      |             |      | 33.4         | 6.9  |
|                  | 11           | 42.0 | 10.2        | 38.4 | 8.7          |      |
|                  | 17           |      |             |      | 27.3         | 6.6  |
|                  | 18           | 37.3 | 10.6        | 33.0 | 8.9          |      |
|                  | 23           |      |             |      | 33.7         | 7.8  |
|                  | 25           | 46.8 | 12.1        | 43.3 | 10.4         |      |
| March            | 2            |      |             |      | 29.1         | 8.3  |
|                  | 4            | 49.1 | 13.2        | 45.5 | 11.2         |      |
|                  | 9            |      |             |      | 44.4         | 10.1 |
|                  | 11           | 58.4 | 15.6        | 53.2 | 13.0         |      |
|                  | 16           |      |             |      | 34.7         | 9.7  |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             | Station R-1A |      | Station R-3 |      | Station R-25 |          |
|------------------|--------------|------|-------------|------|--------------|----------|
|                  | Depth        | W.E. | Depth       | W.E. | Depth        | W.E.     |
| <u>YEAR 1971</u> |              |      |             |      |              |          |
| March            | 17           | 50.2 | 15.3        |      |              |          |
|                  | 18           |      | 42.2        | 12.5 |              |          |
|                  | 23           |      |             |      | 35.6         | 10.7     |
|                  | 24           | 53.5 | 16.5        |      |              |          |
|                  | 25           |      | 46.1        | 13.7 |              |          |
|                  | 31           |      |             |      | 32.5         | 10.2     |
| April            | 1            | 49.2 | 16.6        | 43.2 | 13.7         |          |
|                  | 5            | 44.8 | 16.2        | 38.7 | 13.5         | 26.3 9.1 |
|                  | 6            |      |             | 38.6 | 13.2         | 25.6 8.8 |
|                  | 7            |      |             | 40.3 | 13.5         | 25.7 9.9 |
|                  | 9            |      |             | 40.5 | 13.5         |          |
|                  | 12           |      |             | 37.6 | 14.2         |          |
|                  | 13           |      |             |      |              | 17.9 7.1 |
|                  | 14           | 41.6 | 16.6        | 33.9 | 13.7         |          |
|                  | 16           |      |             | 36.5 | 13.4         |          |
|                  | 19           |      |             | 30.5 | 12.7         |          |
|                  | 20           |      |             | 26.5 | 11.1         | 8.3 3.4  |
|                  | 21           | 32.8 | 14.5        | 24.7 | 10.5         |          |
|                  | 22           |      |             | 25.7 | 10.6         |          |
|                  | 23           |      |             | 25.4 | 10.6         |          |
|                  | 26           |      |             | 22.8 | 9.6          |          |
|                  | 28           | 30.3 | 13.5        | 19.3 | 8.4          |          |
|                  | 30           |      |             | 16.7 | 7.3          |          |
| May              | 3            |      |             | 11.4 | 5.2          |          |
|                  | 5            | 20.9 | 9.8         | 9.6  | 4.1          |          |
|                  | 7            |      |             | 6.0  | 2.2          |          |

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- indicates no measurement made



Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             | Station R-1A |      | Station R-3 |      | Station R-16 |      | Station R-25 |      |
|------------------|--------------|------|-------------|------|--------------|------|--------------|------|
|                  | Depth        | W.E. | Depth       | W.E. | Depth        | W.E. | Depth        | W.E. |
| <u>YEAR 1971</u> |              |      |             |      |              |      |              |      |
| November 29      |              |      | 13.5        | 2.0  |              |      |              |      |
| 30               |              |      |             |      | 19.8         | 2.9  | 18.4         | 2.5  |
| December 2       | 19.2         | 3.1  |             |      |              |      |              |      |
| 7                |              |      |             |      | 19.7         | 3.7  |              |      |
| 8                |              |      |             |      |              |      | 15.7         | 3.0  |
| 9                | 19.0         | 4.0  | 19.1        | 4.0  |              |      |              |      |
| 14               |              |      |             |      | 15.2         | 3.7  |              |      |
| 15               |              |      |             |      |              |      | 11.7         | 2.5  |
| 16               | 16.2         | 4.2  | 15.7        | 4.1  |              |      |              |      |
| 21               |              |      |             |      | 15.4         | 4.0  | 11.4         | 2.7  |
| 23               | 17.4         | 4.3  | 15.0        | 4.1  |              |      |              |      |
| 28               |              |      |             |      | 16.8         | 4.3  | 11.2         | 3.1  |
| 29               | 21.4         | 5.0  |             |      |              |      |              |      |
| 30               |              |      | 19.7        | 5.2  |              |      |              |      |
| <u>YEAR 1972</u> |              |      |             |      |              |      |              |      |
| January 4        |              |      |             |      | 24.3         | 5.3  | 17.9         | 3.9  |
| 5                | 28.5         | 5.8  |             |      |              |      |              |      |
| 6                |              |      | 26.8        | 6.7  |              |      |              |      |
| 11               |              |      |             |      | 23.7         | 5.9  | 17.9         | 4.3  |
| 13               | 26.2         | 6.5  | 24.3        | 6.5  |              |      |              |      |
| 18               |              |      |             |      | 22.4         | 5.9  |              |      |
| 19               |              |      |             |      |              |      | 15.1         | 4.3  |
| 20               | 23.0         | 6.4  | 21.4        | 6.0  |              |      |              |      |
| 25               |              |      |             |      | 22.5         | 6.3  | 15.8         | 4.4  |
| 27               | 25.9         | 7.5  | 23.8        | 6.8  |              |      |              |      |
| February 1       |              |      |             |      | 24.7         | 6.2  | 17.5         | 4.7  |
| 3                | 29.5         | 7.3  | 25.2        | 6.3  |              |      |              |      |
| 9                |              |      |             |      | 28.7         | 7.3  | 20.0         | 5.3  |
| 10               | 33.0         | 8.4  | 29.7        | 8.0  |              |      |              |      |
| 15               |              |      |             |      | 26.9         | 7.2  | 18.3         | 5.2  |
| 18               | 31.0         | 8.6  | 25.7        | 7.7  |              |      |              |      |
| 23               |              |      |             |      | 32.0         | 8.1  | 23.6         | 6.2  |
| 24               | 43.9         | 10.4 | 34.0        | 8.4  |              |      |              |      |
| 29               |              |      |             |      | 34.4         | 8.9  | 26.5         | 6.8  |

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Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date      |    | Station | R-1A | Station | R-3  | Station | R-16 | Station | R-25 |
|-----------|----|---------|------|---------|------|---------|------|---------|------|
|           |    | Depth   | W.E. | Depth   | W.E. | Depth   | W.E. | Depth   | W.E. |
| YEAR 1972 |    |         |      |         |      |         |      |         |      |
| March     | 1  | 42.4    | 11.1 |         |      |         |      |         |      |
|           | 3  |         |      | 33.3    | 8.9  |         |      |         |      |
|           | 7  |         |      |         |      | 36.2    | 9.8  | 28.0    | 7.5  |
|           | 9  | 46.7    | 12.4 | 40.3    | 10.2 |         |      |         |      |
|           | 14 |         |      |         |      | 34.1    | 10.0 | 26.1    | 7.5  |
|           | 16 | 48.6    | 13.8 | 41.9    | 11.0 |         |      |         |      |
|           | 21 |         |      |         |      | 33.7    | 10.5 | 26.0    | 8.1  |
|           | 23 | 42.3    | 13.6 | 34.8    | 11.4 |         |      |         |      |
|           | 27 |         |      | 35.8    | 11.0 |         |      | 24.1    | 7.3  |
|           | 28 |         |      |         |      | 32.6    | 11.2 |         |      |
|           | 30 | 40.5    | 14.4 |         |      |         |      |         |      |
|           | 31 |         |      | 33.0    | 11.5 | 29.7    | 10.5 | 20.9    | 7.4  |
| April     | 3  |         |      | 32.7    | 11.4 |         |      | 19.0    | 6.7  |
|           | 4  |         |      |         |      | 26.5    | 9.1  | 17.7    | 6.5  |
|           | 5  | 42.2    | 14.3 |         |      |         |      | 18.3    | 6.5  |
|           | 10 |         |      | 31.9    | 12.0 |         |      | 17.6    | 6.4  |
|           | 11 |         |      |         |      | 24.3    | 8.6  | 16.7    | 6.0  |
|           | 12 | 39.0    | 14.6 |         |      |         |      | 16.2    | 5.5  |
|           | 13 |         |      |         |      |         |      | 14.5    | 5.1  |
|           | 14 |         |      |         |      |         |      | 16.9    | 6.0  |
|           | 17 |         |      | 31.5    | 12.6 | 23.2    | 9.3  | 14.8    | 5.5  |
|           | 18 |         |      | 30.4    | 11.6 |         |      | 12.1    | 4.4  |
|           | 19 |         |      | 28.6    | 11.5 | 20.7    | 8.1  | 10.3    | 3.7  |
|           | 20 | 37.4    | 14.1 | 28.8    | 10.1 |         |      | 8.7     | 2.8  |
|           | 21 |         |      | 27.6    | 10.4 | 18.6    | 6.9  | 7.7     | 2.3  |
|           | 24 |         |      | 26.2    | 10.3 | 16.8    | 6.3  | 3.2     | 1.5  |
|           | 25 |         |      | 25.1    | 10.0 |         |      | 2.8     | 0.8  |
|           | 26 | 33.9    | 13.3 |         |      | 14.2    | 5.4  | 0.0     | 0.0  |
|           | 27 |         |      | 24.8    | 9.2  |         |      |         |      |
|           | 28 |         |      | 24.2    | 9.4  | 13.1    | 4.7  |         |      |
| May       | 1  |         |      | 14.6    | 5.5  | 2.1     | 0.9  |         |      |
|           | 2  |         |      | 12.8    | 5.3  | 0.0     | 0.0  |         |      |
|           | 3  |         |      | 11.1    | 4.2  |         |      |         |      |
|           | 5  | 17.8    | 6.6  | 6.5     | 2.5  |         |      |         |      |
|           | 10 | 5.6     | 2.1  |         |      |         |      |         |      |

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- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             | Station R-1A |      | Station R-3 |      | Station R-16 |      | Station R-25 |      |
|------------------|--------------|------|-------------|------|--------------|------|--------------|------|
|                  | Depth        | W.E. | Depth       | W.E. | Depth        | W.E. | Depth        | W.E. |
| <u>YEAR 1972</u> |              |      |             |      |              |      |              |      |
| December         | 5            |      |             |      | 17.8         | 3.1  | 15.4         | 2.4  |
|                  | 7            | 15.3 | 3.4         | 13.2 | 3.0          |      |              |      |
|                  | 12           |      |             |      | 18.0         | 3.4  | 14.5         | 2.7  |
|                  | 14           | 19.4 | 4.4         | 17.1 | 3.7          |      |              |      |
|                  | 18           |      |             |      |              |      | 21.1         | 3.5  |
|                  | 19           |      |             |      | 26.4         | 5.0  |              |      |
|                  | 21           |      |             | 26.3 | 5.7          |      |              |      |
|                  | 22           | 28.1 | 6.0         |      |              |      |              |      |
|                  | 27           |      |             | 26.5 | 6.4          | 24.1 | 5.7          | 19.9 |
|                  | 29           | 27.9 | 6.8         |      |              |      |              |      |
| <u>YEAR 1973</u> |              |      |             |      |              |      |              |      |
| January          | 2            |      |             |      |              |      | 20.1         | 4.6  |
|                  | 3            |      |             |      | 25.3         | 6.3  |              |      |
|                  | 4            | 28.4 | 7.6         | 26.0 | 6.8          |      |              |      |
|                  | 9            |      |             |      | 25.4         | 6.4  | 20.4         | 5.0  |
|                  | 11           | 33.2 | 8.1         | 29.5 | 7.5          |      |              |      |
|                  | 16           |      |             |      | 27.2         | 7.1  | 21.8         | 5.4  |
|                  | 18           | 29.6 | 8.6         | 25.9 | 7.6          |      |              |      |
|                  | 23           |      |             |      | 20.9         | 7.2  | 15.9         | 5.2  |
|                  | 26           | 28.2 | 8.3         | 21.9 | 7.6          |      |              |      |
|                  | 30           |      |             |      | 25.5         | 7.8  | 20.5         | 5.8  |
| February         | 1            | 36.4 | 9.9         | 27.4 | 8.0          |      |              |      |
|                  | 6            |      |             |      | 23.9         | 8.5  |              |      |
|                  | 7            |      |             |      |              |      | 18.3         | 6.1  |
|                  | 8            | 31.0 | 9.6         | 23.0 | 7.8          |      |              |      |
|                  | 13           |      |             |      | 26.5         | 7.9  | 20.2         | 6.1  |
|                  | 15           | 40.5 | 10.4        | 31.0 | 8.3          |      |              |      |
|                  | 21           |      |             |      | 28.4         | 8.5  | 22.5         | 6.4  |
|                  | 22           | 39.6 | 11.1        | 28.9 | 8.6          |      |              |      |
|                  | 27           |      |             |      | 28.9         | 8.8  | 22.0         | 7.0  |
|                  | 28           | 37.6 | 10.9        | 27.9 | 8.5          |      |              |      |
| March            | 6            |      |             |      | 24.6         | 8.6  | 18.1         | 6.1  |
|                  | 7            | 33.5 | 11.1        | 23.9 | 8.3          |      |              |      |
|                  | 9            |      |             | 19.4 | 6.8          |      |              |      |
|                  | 12           |      |             | 15.5 | 5.6          |      |              |      |
|                  | 13           |      |             | 14.2 | 5.2          | 16.8 | 6.5          | 11.4 |

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- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             |    | Station<br>Depth | R-1A<br>W.E. | Station<br>Depth | R-3<br>W.E. | Station<br>Depth | R-16<br>W.E. | Station<br>Depth | R-25<br>W.E. |
|------------------|----|------------------|--------------|------------------|-------------|------------------|--------------|------------------|--------------|
| <u>YEAR 1973</u> |    |                  |              |                  |             |                  |              |                  |              |
| March            | 14 | 24.2             | 9.1          |                  |             |                  |              |                  |              |
|                  | 15 |                  |              | 13.6             | 4.5         |                  |              |                  |              |
|                  | 16 |                  |              | 11.8             | 4.2         |                  |              |                  |              |
|                  | 19 |                  |              | 12.2             | 4.0         |                  |              |                  |              |
|                  | 20 |                  |              |                  |             | 15.2             | 4.5          | 9.6              | 3.0          |
|                  | 22 | 22.6             | 8.7          |                  |             |                  |              |                  |              |
|                  | 23 |                  |              | 10.8             | 4.1         |                  |              |                  |              |
|                  | 26 |                  |              | 9.4              | 3.9         |                  |              |                  |              |
|                  | 27 |                  |              | 8.5              | 3.6         | 10.1             | 3.7          | 4.4              | 1.8          |
|                  | 29 | 18.0             | 7.7          | 7.9              | 2.9         |                  |              |                  |              |
|                  | 30 |                  |              | 6.2              | 2.6         |                  |              |                  |              |
|                  |    |                  |              |                  |             |                  |              |                  |              |
| April            | 2  |                  |              | 3.3              | 1.2         |                  |              |                  |              |
|                  | 3  |                  |              |                  |             | 4.4              | 0.8          | 0.0              | 0.0          |
|                  | 5  | 26.1             | 7.6          |                  |             |                  |              |                  |              |
|                  | 11 |                  |              |                  |             | 9.0              | 1.2          |                  |              |
|                  | 12 | 27.5             | 8.4          |                  |             |                  |              |                  |              |
|                  | 17 |                  |              |                  |             | 0.0              | 0.0          |                  |              |
|                  | 19 | 11.8             | 5.5          |                  |             |                  |              |                  |              |
|                  | 26 | 0.0              | 0.0          |                  |             |                  |              |                  |              |

W.E. is snow cover water-equivalent

(E) means estimated value

- indicates no measurement made

Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             | Station<br>Depth | R-1A<br>W.E. | Station<br>Depth | R-3<br>W.E. | Station<br>Depth | R-16<br>W.E. | Station<br>Depth | R-25<br>W.E. |
|------------------|------------------|--------------|------------------|-------------|------------------|--------------|------------------|--------------|
| <u>YEAR 1973</u> |                  |              |                  |             |                  |              |                  |              |
| December         | 18               |              |                  |             | 8.1              | 1.5          | 7.2              | 1.5          |
|                  | 19               |              | 8.7              | 1.5         |                  |              |                  |              |
|                  | 20               | 10.6         | 1.7              |             | 9.1              | 1.5          |                  |              |
|                  | 26               |              |                  |             | 6.9              | 2.3          | 6.5              | 1.8          |
|                  | 27               | 8.0          | 2.0              | 6.3         | 1.9              |              |                  |              |
| <u>YEAR 1974</u> |                  |              |                  |             |                  |              |                  |              |
| January          | 2                |              |                  |             | 8.4              | 2.3          | 7.8              | 1.7          |
|                  | 3                | 11.7         | 1.9              | 9.1         | 1.8              |              |                  |              |
|                  | 8                |              |                  |             | 10.7             | 2.5          | 9.0              | 2.1          |
|                  | 10               | 17.7         | 3.3              | 14.9        | 3.1              |              |                  |              |
|                  | 15               | 13.9         | 3.1              |             | 14.2             | 3.5          | 12.6             | 3.0          |
|                  | 17               | 21.7         | 4.5              | 17.8        | 4.0              |              |                  |              |
|                  | 22               |              |                  |             | 15.4             | 3.3          | 14.0             | 3.6          |
|                  | 25               | 19.2         | 4.1              | 15.5        | 4.1              |              |                  |              |
|                  | 29               |              |                  |             | 15.7             | 4.5          | 12.2             | 3.5          |
|                  | 31               | 19.2         | 4.4              | 14.9        | 4.0              |              |                  |              |
| February         | 5                |              |                  |             | 13.3             | 4.6          | 9.5              | 3.4          |
|                  | 6                | 18.1         | 5.1              |             |                  |              |                  |              |
|                  | 7                |              |                  | 17.3        | 4.6              |              |                  |              |
|                  | 12               |              |                  |             | 19.2             | 5.3          | 15.4             | 4.0          |
|                  | 13               |              |                  | 18.3        | 5.2              |              |                  |              |
|                  | 14               | 23.4         | 5.6              |             |                  |              |                  |              |
|                  | 20               |              |                  |             | 24.6             | 6.5          | 20.3             | 5.2          |
|                  | 22               | 30.1         | 6.5              | 25.3        | 6.1              |              |                  |              |
|                  | 26               |              |                  |             | 21.2             | 6.8          | 17.6             | 5.6          |
|                  | 27               | 29.2         | 6.8              |             |                  |              |                  |              |
|                  | 28               |              |                  | 22.4        | 6.4              |              |                  |              |
| March            | 5                |              |                  |             |                  |              | 13.0             | 5.4          |
|                  | 6                |              |                  |             | 16.7             | 6.1          |                  |              |
|                  | 7                | 23.1         | 7.2              | 15.7        | 5.7              |              |                  |              |
|                  | 8                |              |                  | 14.0        | 5.1              | 14.4         | 5.9              | 7.3          |
|                  | 12               |              |                  |             | 16.1             | 6.0          | 7.5              | 3.4          |
|                  | 13               |              |                  | 14.8        | 5.7              |              |                  |              |
|                  | 14               | 23.1         | 7.1              |             |                  |              |                  |              |
|                  | 19               |              |                  |             | 23.2             | 7.7          | 13.7             | 4.8          |
|                  | 21               | 35.6         | 9.8              | 25.4        | 7.4              |              |                  |              |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made



Snow Course Data  
ARS W-3 Watershed near Danville, Vermont  
All values are in inches

| Date             |    | Station R-1A | Station R-3 | Station R-16 | Station R-25 |
|------------------|----|--------------|-------------|--------------|--------------|
|                  |    | Depth W.E.   | Depth W.E.  | Depth W.E.   | Depth W.E.   |
| <u>YEAR 1974</u> |    |              |             |              |              |
| March            | 26 |              |             | 26.9         | 8.9          |
|                  | 28 | 40.2 11.3    | 30.8 9.2    |              | 17.5 5.8     |
| April            | 2  |              |             | 25.8         | 9.5          |
|                  | 4  | 30.3 9.9     | 22.5 9.0    |              | 16.3 6.2     |
|                  | 5  |              | 18.7 7.7    | 18.6         | 8.5          |
|                  | 8  |              | 20.1 7.2    | 20.3         | 8.0          |
|                  | 10 |              | 27.6 8.2    | 19.5         | 5.4          |
|                  | 11 | 36.4 10.6    |             |              |              |
|                  | 12 |              |             | 24.6         | 9.6          |
|                  | 15 |              | 15.5 6.2    | 17.1         | 7.9          |
|                  | 17 |              | 15.4 6.4    | 16.9         | 7.7          |
|                  | 19 | 21.4 8.1     | 11.5 4.9    | 12.9         | 6.0          |
|                  | 22 |              | 4.6 2.3     | 5.6          | 3.0          |
|                  | 25 | 17.9 5.2     | 5.3 1.0     | 4.0          | 1.7          |
| May              | 26 |              | 0.0 0.0     |              |              |
|                  | 30 |              |             | 0.0          | 0.0          |
|                  | 1  | 0.0 0.0      |             |              |              |

W.E. is snow cover water-equivalent  
(E) means estimated value  
- indicates no measurement made

## APPENDIX D

### PAN EVAPORATION DATA

This appendix contains the tabulation of the pan evaporation data for the W-3 watershed. Data from two evaporation pans are tabulated. The first is a Class A pan located at station R-12. The second is an insulated, experimental, X-3 evaporation pan located at the NOAA-ARS Snow Research Station. Evaporation measurements are available from 1963 through 1974 (except for 1972) from the Class A pan and from 1968 through 1973 (except for 1969) from the X-3 pan. Measurements are initiated each spring, usually sometime in May, and continued until freezing of the water in the pan stops data collection, generally in October. Thus, in this appendix evaporation data are only tabulated for the period from May through October of each year. Detailed information on the evaporation pans and the quality of the data is contained in chapter III.6.

Daily Pan Evaporation    ARS W-3 Watershed near Danville, Vermont  
Class A evaporation pan located at ARS site R-12    (Daily values are in inches)

| Date | May     | June    | 1963    |         |         | Date | May     | June    | 1964    |         |         | Sept. | Oct. |
|------|---------|---------|---------|---------|---------|------|---------|---------|---------|---------|---------|-------|------|
|      |         |         | July    | Aug.    | Sept.   |      |         |         | July    | Aug.    | Sept.   |       |      |
| 1    |         |         | .726(3) | .243    |         | 1    |         | .572(4) | .421    |         |         | .144  |      |
| 2    |         |         | .380    | .171    |         | 2    |         | .104    | .256    |         |         | .238  |      |
| 3    |         | .737(3) | .372    |         | .598(4) | 3    |         | .209    |         | .512(3) | .159    |       |      |
| 4    |         | .217    |         |         | .173    | 4    | .697(3) |         |         | .254    | .134    |       |      |
| 5    |         | .176    | .441(2) | .482(3) | .172    | 5    | .149    | .414(2) |         | .113    |         |       |      |
| 6    |         | .213    |         | .119    | .289    | 6    | .331    |         | .620(4) | .060    |         |       |      |
| 7    | .360    | .212    |         | .204    |         | 7    | .195    |         | .177    | .172    |         |       |      |
| 8    | .259    |         | .459(3) | .116    |         | 8    | .255    | .608(3) | .100    |         | .466(4) |       |      |
| 9    | .191    |         | .350    | .168    | .400(3) | 9    |         | .252    | .209    |         | .100    |       |      |
| 10   | .197    | .719(3) | .120    |         | .152    | 10   |         | .215    | .188    | .562(3) | .172    |       |      |
| 11   |         | .221    | .126    |         | .135    | 11   | .295(3) | .192    |         | .158    | .015    |       |      |
| 12   |         | .040    | .035    | .418(3) | .132    | 12   | .182    | .239    |         | .188    |         |       |      |
| 13   | .262(3) | .010    |         | .179    | .074    | 13   | .232    |         |         | .276    |         |       |      |
| 14   | .164    | .252    |         | .046    |         | 14   |         | .549(4) | .165    |         | .349(3) |       |      |
| 15   | .085    |         | .659(3) | .051    |         | 15   | .201(2) | .612(3) |         |         | .093    |       |      |
| 16   | .250    |         | .134    | .231    | .356(3) | 16   |         | .131    | .347(2) |         | .256    |       |      |
| 17   | .238    | .428(3) | .126    |         | .103    | 17   |         | .302    | .225    | .406(3) | .070    |       |      |
| 18   |         | .102    | .237    |         | .101    | 18   | .656(3) | .332    |         | .094    | .037    |       |      |
| 19   |         | .264    | .142    | .357(3) | .135    | 19   | .0      | .228    |         | .286    |         |       |      |
| 20   | .514(3) | .246    |         | .103    | .111    | 20   | .0      |         | .771(3) | .123    |         |       |      |
| 21   | .083    | .246    |         | .116    |         | 21   | .185    |         | .221    | .091    | .374(3) |       |      |
| 22   | .176    |         | .710(3) | .194    | .065    | 22   | .133    | .910(3) | .247    |         | .115    |       |      |
| 23   | .236    |         | .194    | .206    | .279(3) | 23   |         | .357    | .178    | .467(2) | .132    |       |      |
| 24   | .040    | .476(3) | .191    |         | .081    | 24   |         | .222    | .208    | .107    | .158    |       |      |
| 25   |         | .355    | .329    |         | .099    | 25   | .420(3) | .285    |         | .153    |         |       |      |
| 26   |         | .229    | .186    | .526(3) | .133    | 26   | .246    | .265    |         | .166    |         |       |      |
| 27   | .600(3) | .339    |         | .158    | .139    | 27   | .272    |         | .406(3) | .056    |         |       |      |
| 28   | .258    | .197    |         | .147    |         | 28   | .200    |         | .221    | .116    | .549(4) |       |      |
| 29   | .226    |         | .875(3) | .127    |         | 29   |         | .885(3) | .257    |         |         |       |      |
| 30   |         |         | .425    | .0      | .232(3) | 30   |         | .057    | .227    |         |         |       |      |
| 31   | .233(2) |         | .213    |         |         | 31   |         |         | .326    | .591(3) |         |       |      |

|            |       |       |       |       |       |       |      |       |       |       |       |       |
|------------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Daily (in) | 0.175 | 0.203 | 0.225 | 0.145 | 0.126 | 0.100 | (in) | 0.172 | 0.224 | 0.199 | 0.165 | 0.127 |
| avg. (mm)  | 4.44  | 5.16  | 5.72  | 3.68  | 3.20  | 2.54  | (mm) | 4.37  | 5.69  | 5.05  | 4.19  | 3.23  |

Note: Cumulative values are followed by the number of days represented by the measurement.  
E indicates estimated value.

Daily Pan Evaporation ARS W-3 Watershed near Danville, Vermont  
Class A evaporation pan located at ARS site R-12  
(Daily values are in inches)

| Date | 1965    |         |         |         |         | 1966    |     |         |          |         | Date | May | June | July | Aug. | Sept. | Oct.    | Oct.    |
|------|---------|---------|---------|---------|---------|---------|-----|---------|----------|---------|------|-----|------|------|------|-------|---------|---------|
|      | May     | June    | July    | Aug.    | Sept.   | Oct.    | May | June    | July     | Aug.    |      |     |      |      |      |       |         |         |
| 1    |         | .785(4) | .170    |         | .055    | .162    | 1   | .095    | .274     | .743(3) |      |     |      |      |      |       | .147    |         |
| 2    |         | .197    | .314    | .525(3) | .0      |         | 2   |         |          | .238    |      |     |      |      |      |       | .275    |         |
| 3    | .865(3) | .244    |         | .113    | .159    |         | 3   | .256(3) | .193(2)  | .136    |      |     |      |      |      |       |         | .345(3) |
| 4    | .180    | .163    |         | .138    |         |         | 4   | .047    |          | .083    |      |     |      |      |      |       |         |         |
| 5    | .202    |         |         | .261    |         |         | 5   | .161    | 1.198(4) | .230    |      |     |      |      |      |       |         |         |
| 6    | .320    |         | .854(4) | .227    |         |         | 6   | .176    | .671(3)  | .189    |      |     |      |      |      |       | .345(4) |         |
| 7    | .145    | .942(3) | .261    |         | .611(4) |         | 7   | .260    | .076     |         |      |     |      |      |      |       | .143    |         |
| 8    |         | .304    | .267    |         | .137    | .0      | 8   | .131    | .216     | .702(3) |      |     |      |      |      |       | .062    |         |
| 9    |         | .233    | .168    | .709(3) | .037    | (7)     | 9   | .200(3) | .157     | .162    |      |     |      |      |      |       | .144    |         |
| 10   | .582(3) | .251    |         | .143    | .242    |         | 10  | .155    |          | .249    |      |     |      |      |      |       |         |         |
| 11   | .482    | .344    |         | .247    |         |         | 11  | .130(2) |          | .141    |      |     |      |      |      |       |         |         |
| 12   | .236    |         | .773(3) | .225    | .013    |         | 12  | .164    | .733(3)  | .185    |      |     |      |      |      |       | .572(3) |         |
| 13   | .272    |         | .187    | .164    | .463(3) |         | 13  | .048    | .231     |         |      |     |      |      |      |       | .139    |         |
| 14   | .213    | .580(3) | .244    |         | .021    |         | 14  |         | .490(3)  | .073    |      |     |      |      |      |       | .042    |         |
| 15   |         | .041    | .114    | .104    | .013    |         | 15  | .151    | .313     |         |      |     |      |      |      |       | .023    |         |
| 16   |         | .130    | .300    | .590(3) | .0      |         | 16  | .240    | .282     | .603(3) |      |     |      |      |      |       | .078    |         |
| 17   | .510(3) | .167    |         | .230    | .118    |         | 17  | .406(3) | .178     | .078    |      |     |      |      |      |       | .053    |         |
| 18   | .118    | .019    |         | .307    |         |         | 18  | .044    | .020     | .274    |      |     |      |      |      |       |         |         |
| 19   | .071    |         | .25E(3) | .136    |         | .370(3) | 19  | .128    |          | .122    |      |     |      |      |      |       |         |         |
| 20   | .093    |         | .238    | .104    | .070(3) | .033    | 20  | .066    |          | .198    |      |     |      |      |      |       | .301(3) |         |
| 21   | .279    | .632(3) | .072    |         | .016    | .060    | 21  | .023    | .656(3)  | .085    |      |     |      |      |      |       | .069    |         |
| 22   |         | .199    | .215    |         | .161    | .102    | 22  |         | .294     | .269    |      |     |      |      |      |       | .131    |         |
| 23   |         | .334    | .183    | .496(3) | .170    | .092    | 23  | .716(3) | .309     | .155    |      |     |      |      |      |       | .609(3) |         |
| 24   | .637(3) | .278    |         | .161    | .168    |         | 24  | .246    | .239     | .019    |      |     |      |      |      |       | .063    |         |
| 25   | .242    | .212    |         | .178    |         |         | 25  | .275    | .293     | .055    |      |     |      |      |      |       | .013    |         |
| 26   | .221    |         | .566(3) | .055    |         |         | 26  | .267    |          |         |      |     |      |      |      |       |         |         |
| 27   | .280    |         | .365    | .023    | .370(3) |         | 27  | .275    | .580(3)  | .058    |      |     |      |      |      |       | .318(3) |         |
| 28   | .099    | .831(3) | .233    |         | .109    |         | 28  |         | .243     | .172    |      |     |      |      |      |       | .164    |         |
| 29   |         | .305    | .172    |         | .106    |         | 29  | .387    | .212     | .477    |      |     |      |      |      |       | .033    |         |
| 30   |         | .311    | .212    | .483(3) | .029    |         | 30  | .102    | .033     |         |      |     |      |      |      |       | .094    |         |
| 31   |         |         |         | .145    |         |         | 31  | .503    |          | .142(3) |      |     |      |      |      |       | .034    |         |
|      |         |         |         |         |         |         |     | .985(4) |          | .173    |      |     |      |      |      |       |         |         |

Daily (in) 0.216 0.227 0.205 0.177 0.102 0.052 (in) 0.149 0.196 0.220 0.177 0.106 0.115  
 avg. (mm) 5.49 5.77 5.21 4.50 2.59 1.32 (mm) 3.78 4.98 5.59 4.50 2.69 2.92

Note: Cumulative values are followed by the number of days represented by the measurement.  
 E indicates estimated value.

Daily Pan Evaporation    ARS W-3 Watershed    near Danville, Vermont  
Class A evaporation pan located at    ARS site R-12    (Daily values are in inches)

| Date | 1967    |         |         |         |         | 1968    |      |         |         |         |         |         |         |
|------|---------|---------|---------|---------|---------|---------|------|---------|---------|---------|---------|---------|---------|
|      | May     | June    | July    | Aug.    | Sept.   | Oct.    | Date | May     | June    | July    | Aug.    | Sept.   | Oct.    |
| 1    | .740(3) | .193    |         | .325    | .044    | .287(3) | 1    |         |         | .506(3) | .266    |         | .046    |
| 2    | .218    | .272    |         | .206    |         |         | 2    | .299(2) |         | .264    | .134    |         | .117    |
| 3    | .220    |         | .429(3) | .207    |         |         | 3    | .171    | .353(3) | .400    |         | .552(4) | .082    |
| 4    | .093    |         |         | .071    |         |         | 4    |         | .126    |         |         | .126    | .112    |
| 5    | .154    | .856(3) | .215(2) |         | .422(4) |         | 5    |         | .193    | .474(2) | .502(3) | .042    |         |
| 6    |         | .244    | .137    |         | .155    |         | 6    | .206(3) | .270    | .189    |         | .113    |         |
| 7    |         | .281    | .162    | .463(3) | .170    |         | 7    | .223    | .204    | .040    |         |         | .124(3) |
| 8    | .352(3) | .277    |         | .168    | .140    |         | 8    | .237    |         | .478(3) | .136    |         | .014    |
| 9    | .050    | .080    |         | .157    |         |         | 9    | .227    |         | .271    | .203    | .320(3) | .034    |
| 10   | .032    |         | .443(3) | .071    |         |         | 10   | .068    | .447(3) | .244    |         | .173    | .069    |
| 11   | .041    |         | .285    | .252    | .362(3) |         | 11   |         | .114    | .189    |         | .188    | .029    |
| 12   | .101    | .658(3) | .200    |         | .140    |         | 12   |         | .009    | .252    | .496(3) | .0      |         |
| 13   |         | .139    | .161    |         | .125    |         | 13   | .399(3) | .052    |         | .267    | .119    |         |
| 14   |         | .183    | .267    | .337(3) | .131    |         | 14   | .204    | .090    |         | .188    |         | .206(3) |
| 15   | .594(3) | .012    |         | .120    | .154    |         | 15   | .283    |         | .573(3) | .304    |         | .082    |
| 16   | .034    | .056    |         | .156    |         |         | 16   | .184    |         | .355    | .201    | .260(3) | .050    |
| 17   | .154    |         | .454(3) | .154    |         |         | 17   | .272    | .475(3) | .158    |         | .092    | .078    |
| 18   | .181    |         | .144    | .182    | .400(3) |         | 18   |         | .044    | .124    |         | .110    | .072    |
| 19   | .059    | .658(3) | .115    |         | .118    |         | 19   |         | .112    | .196    | .582(3) | .144    |         |
| 20   | .125    | .181    | .126    |         | .174    |         | 20   | .142(3) | .110    |         | .131    | .153    |         |
| 21   |         | .134    | .175    | .336(3) | .142    |         | 21   | .080    | .075    | .165    |         |         | .287(3) |
| 22   | .447(2) | .160    |         | .142    | .065    |         | 22   | .123    |         | .826(3) | .159    |         | .084    |
| 23   | .060    | .026    |         | .140    |         |         | 23   | .099    |         | .447    | .096    | .414(3) | .030    |
| 24   | .211    |         | .532(3) | .146    |         |         | 24   | .155    | .167(3) | .102    |         | .152    | .053    |
| 25   | .202    |         | .196    | .167    | .146(3) |         | 25   |         | .091    | .128    |         | .064    | .033    |
| 26   | .097    | .757(3) | .245    |         | .049    |         | 26   |         | .056    | .150    | .532(3) |         |         |
| 27   |         | .257    | .203    |         | .114    |         | 27   | .664(3) | .082    |         | .183    | .215(2) |         |
| 28   |         | .168    | .168    |         | .112    |         | 28   | .198    | .037    |         | .062    |         | .146(3) |
| 29   | .505(3) | .241    |         | .227(4) | .065    |         | 29   | .282    |         | .691(3) | .077    |         | .010    |
| 30   |         | .277    |         | .128    |         |         | 30   |         |         | .218    | .093    | .219(3) | .076    |
| 31   | .510(2) |         | .364(3) | .146    |         |         | 31   | .236(2) |         | .098    |         |         |         |

Daily (in) 0.160 0.204 0.162 0.139 0.111 0.096 (in) 0.153 0.111 0.216 0.167 0.111 0.061  
 avg. (mm) 4.06 5.18 4.11 3.53 2.82 2.44 (mm) 3.89 2.82 5.49 4.24 2.82 1.55

Note: Cumulative values are followed by the number of days represented by the measurement.  
 E indicates estimated value.



Daily Pan Evaporation    ARS W-3 Watershed near Danville, Vermont  
Class A evaporation pan located at ARS site R-12  
(Daily values are in inches)

| Date | 1969    |         |         |         |         |         |      |         |         |         |         |         | 1970    |  |  |  |
|------|---------|---------|---------|---------|---------|---------|------|---------|---------|---------|---------|---------|---------|--|--|--|
|      | May     | June    | July    | Aug.    | Sept.   | Oct.    | Date | May     | June    | July    | Aug.    | Sept.   | Oct.    |  |  |  |
| 1    | .121    |         | .391    | .225    |         | .075    | 1    |         | .908(4) | .044    |         | .158    | .022    |  |  |  |
| 2    |         | .828(4) | .207    |         | .594(4) | .085    | 2    |         | .104    | .202    |         | .225    | .036    |  |  |  |
| 3    |         | .160    | .189    |         | .113    | .006    | 3    |         | .310    | .0      | .566(3) | .233    |         |  |  |  |
| 4    |         | .247    |         | .473(3) | .075    |         | 4    | .535(3) | .144    |         | .186    | .022    |         |  |  |  |
| 5    | .630(4) | .112    |         | .090    | .156    |         | 5    | .216    | .169    |         | .246    |         | .099(3) |  |  |  |
| 6    | .164    | .223    |         | .062    |         | .204(3) | 6    | .249    |         |         | .152    |         | .058    |  |  |  |
| 7    | .193    |         | .830(4) | .120    |         | .122    | 7    | .073    |         | .413(4) | .172    |         | .066    |  |  |  |
| 8    | .016    |         | .356    | .160    | .372(3) | .128    | 8    | .215    | .398(3) | .246    |         | .310(4) | .076    |  |  |  |
| 9    | .022    | .472(3) | .258    |         | .019    | .129    | 9    |         | .213    | .228    |         | .079    | .071    |  |  |  |
| 10   |         | .322    | .159    |         | .083    | .129    | 10   |         | .242    | .232    | .631(3) | .024    |         |  |  |  |
| 11   |         | .222    | .071    | .336(3) | .064    |         | 11   | .447(3) | .356    |         | .198    | .124    |         |  |  |  |
| 12   | .243(3) | .280    |         | .278    | .081    |         | 12   |         | .322    |         | .106    |         | .230(3) |  |  |  |
| 13   | .346    | .220    |         | .109    |         | .232(3) | 13   | .345(2) |         | .657(3) | .276    |         | .028    |  |  |  |
| 14   | .210    |         | .375(3) | .216    |         | .018    | 14   | .099    |         | .264    | .203    | .367(3) | .014    |  |  |  |
| 15   | .171    |         | .151    | .202    | .350(3) | .166    | 15   | .264    | .657(3) | .236    |         | .088    | .065    |  |  |  |
| 16   | .137    | .123(3) | .261    |         | .147    | .064    | 16   |         | .259    | .063    |         | .0      | .046    |  |  |  |
| 17   |         | .134    | .282    |         | .012    | .081    | 17   |         | .219    | .088    | .810(3) | .127    |         |  |  |  |
| 18   |         | .130    | .340    | .380(3) | .080    |         | 18   | .385(3) | .153    |         | .234    | .042    |         |  |  |  |
| 19   | .410(3) | .142    |         | .189    | .087    |         | 19   | .104    | .142    |         | .267    |         |         |  |  |  |
| 20   | .060    |         |         | .186    |         | .261(3) | 20   | .164    |         | .697(3) | .218    |         |         |  |  |  |
| 21   | .111    |         |         | .245    |         | .049    | 21   | .258    |         | .265    | .180    | .293(3) |         |  |  |  |
| 22   | .192    |         | .55E(4) | .147    | .291(3) |         | 22   | .211    | .634(3) | .288    |         | .027    |         |  |  |  |
| 23   | .095    | .450(4) | .10E    |         | .076    |         | 23   |         | .054    | .253    |         | .212    |         |  |  |  |
| 24   |         | .005    |         |         | .121    |         | 24   |         | .282    | .263    | .400(3) | .109    |         |  |  |  |
| 25   |         | .004    | .189(2) |         | .050    |         | 25   | .524(3) | .343    |         | .218    | .135    |         |  |  |  |
| 26   | .244(3) | .072    |         | .156(4) | .045    |         | 26   | .070    | .152    |         | .121    |         |         |  |  |  |
| 27   | .295    | .154    |         | .133    |         |         | 27   | .033    |         | .718(3) | .275    |         |         |  |  |  |
| 28   | .177    |         | .262(3) | .134    |         |         | 28   | .226    |         | .263    | .190    | .251(3) |         |  |  |  |
| 29   | .242    |         | .083    | .122    |         |         | 29   |         | .447(3) | .179    |         | .023    |         |  |  |  |
| 30   |         | .869(3) | .068    |         | .203(4) |         | 30   |         | .141    | .165    |         | .025    |         |  |  |  |
| 31   |         |         | .217    |         |         |         | 31   |         |         | .257    | .509(3) |         |         |  |  |  |

Daily (in) 0.141    0.158    0.172    0.137    0.091    0.083    (in) 0.164    0.202    0.194    0.199    0.096    0.051  
 avg. (mm) 3.58    4.01    4.37    3.48    2.31    2.11    (mm) 4.17    5.13    4.93    5.05    2.44    1.30

Note: Cumulative values are followed by the number of days represented by the measurement.  
 E indicates estimated value.

Daily Pan Evaporation    ARS W-3 Watershed near Danville, Vermont  
Class A evaporation pan located at ARS site R-12    (Daily values are in inches)

| Date | 1971    |         |         |         |         |         | 1973 |         |         |         |         |         |         |
|------|---------|---------|---------|---------|---------|---------|------|---------|---------|---------|---------|---------|---------|
|      | May     | June    | July    | Aug.    | Sept.   | Oct.    | Date | May     | June    | July    | Aug.    | Sept.   | Oct.    |
| 1    |         | .817(4) |         |         | .290    | .160    | 1    | .040    | .148    |         | .162    |         | .425(3) |
| 2    |         | .277    | .791(3) | .455(3) | .173    |         | 2    | .099    |         | .38E(3) | .161    |         | .098    |
| 3    |         | .212    |         | .096    | .162    |         | 3    | .103    |         | .22E    | .030    |         | .022    |
| 4    |         | .082    |         |         |         | .311(3) | 4    | .099    | .557(3) | .112    |         | .565(4) | .017    |
| 5    | .008    |         |         | .143(2) | .071    |         | 5    |         | .010    | .090    |         | .192    | .045    |
| 6    | .093    |         | .416(4) | .197    |         |         | 6    |         | .093    | .295    | .739(3) |         |         |
| 7    | .203    | .648(3) | .013    |         | .400(4) | .130(2) | 7    | .243(3) | .141    |         | .044    | .281(2) |         |
| 8    |         | .473    | .320    |         | .130    | .045    | 8    | .198    | .218    |         | .189    |         |         |
| 9    |         | .333    | .292    | .707(3) | .181    |         | 9    | .209    |         | .904(3) | .172    |         | .779(4) |
| 10   | .552(3) | .289    |         | .298    | .225    |         | 10   | .008    |         | .313    | .130    | .355(3) | .079    |
| 11   | .272    | .164    |         | .245    |         |         | 11   | .100    | .812(3) | .125    |         | .134    | .073    |
| 12   | .246    |         | .752(3) | .309    |         | .222(4) | 12   |         | .311    | .276    |         | .101    | .067    |
| 13   | .222    |         | .293    | .313    | .187(3) | .084    | 13   |         | .232    | .217    | .695(3) | .136    |         |
| 14   | .028    | .808(3) | .165    |         | .042    | .024    | 14   | .427(3) | .244    |         | .129    | .125    |         |
| 15   |         | .151    | .156    |         | .069    |         | 15   | .079    | .228    |         | .143    |         | .324(3) |
| 16   |         | .214    | .224    | .521(3) | .088(2) |         | 16   | .116    |         | .500(3) | .068    |         | .088    |
| 17   | .576(3) | .266    |         | .238    | .212    |         | 17   | .245    |         | .236    | .207    | .104(3) |         |
| 18   | .122    | .236    |         | .210    |         | .200(3) | 18   | .188    | .334(3) | .195    |         | .104    | .094(2) |
| 19   | .200    |         | .237(3) | .184    | .069    | .069    | 19   |         | .104    | .159    |         | .276    | .046    |
| 20   | .370    |         | .093    | .287    |         | .085    | 20   |         | .165    | .224    | .562(3) |         |         |
| 21   | .229    | .770(3) | .181    |         | .246(4) | .017    | 21   |         | .202    |         | .193    | .098(2) |         |
| 22   |         | .080    | .254    |         | .113    | .043    | 22   | .052(4) | .153    |         | .199    |         |         |
| 23   |         | .268    | .219    | .771(3) | .113    |         | 23   | .019    |         | .459(3) | .202    |         | .180(4) |
| 24   | .332(3) | .247    |         | .201    | .169    |         | 24   | .140    |         | .251    | .184    | .259(3) |         |
| 25   | .162    | .164    |         | .134    |         |         | 25   | .163    | .438(3) | .274    |         | .017    | .058(2) |
| 26   | .045    |         | .508(3) | .120    |         | .127(4) | 26   |         | .129    | .156    |         | .091    | .072    |
| 27   | .083    |         | .124    | .148    | .296(3) | .032    | 27   |         | .123    | .092    | .448(3) | .057    | .055    |
| 28   | .027    | .759(3) | .207    |         | .103    | .072    | 28   |         | .168    |         | .283    | .071    |         |
| 29   |         | .256    | .275    |         | .083    |         | 29   | .351(4) | .177    |         | .204    |         | .164(2) |
| 30   |         |         | .028    | .2E(3)  | .120(2) |         | 30   |         |         | .569(3) | .190    |         | .024    |
| 31   |         |         |         | .090    |         |         | 31   | .197(2) |         | .208    | .291    |         |         |

Daily (in) 0.157    0.235    0.173    0.178    0.108    0.064    (in) 0.099    0.172    0.196    0.181    0.106    0.082  
 avg. (mm) 3.99    5.97    4.39    4.53    2.74    1.63    (mm) 2.51    4.37    4.98    4.60    2.69    2.08

Note: Cumulative values are followed by the number of days represented by the measurement.  
 E indicates estimated value.

Daily Pan Evaporation ARS W-3 Watershed near Danville, Vermont  
Class A evaporation pan located at ARS site R-12 (Daily values are in inches)

| Date | May     | June    | July    | 1974    |      | Sept.   | Oct.    |
|------|---------|---------|---------|---------|------|---------|---------|
|      |         |         |         | Aug.    | Aug. |         |         |
| 1    |         |         | MSG     | .184    |      |         | .146    |
| 2    |         |         | MSG     | .188    |      |         | .052    |
| 3    |         | .625(3) | MSG     |         |      | .499(4) | .027    |
| 4    |         |         | MSG     |         |      | .0      | .047    |
| 5    |         |         | MSG     | .507(3) |      | .044    |         |
| 6    | .404(3) | .661(3) | MSG     | .167    |      | .118    | .231(3) |
| 7    | .092    | .225    | MSG     | .213    |      |         | .021    |
| 8    | .085    |         | MSG     | .190    |      |         | .185    |
| 9    | .096    |         | .184    | .143    |      | .290(3) | .068    |
| 10   | .096    | .738(3) | .256    |         |      | .126    | .016    |
| 11   |         | .217    | .381    |         |      | .038    |         |
| 12   |         | .202    | .231    | .565(3) |      | .119    |         |
| 13   | .149(3) | .169    |         | .244    |      | .049    |         |
| 14   | .087    | .251    |         |         |      |         |         |
| 15   | .251    |         | .782(3) | .244(2) |      |         | .213(4) |
| 16   | .490    |         | .276    | .238    |      | .519(3) | .075    |
| 17   | .165    | .416(3) | .291    |         |      | .094    | .007    |
| 18   |         | .212    | .212    |         |      | .160    | .041    |
| 19   |         | .229    | .232    | .512(3) |      | .101    |         |
| 20   | .626(3) | .266    |         | .143    |      | .015    |         |
| 21   | .287    | .230    |         | .173    |      |         |         |
| 22   | .088    |         | .615(3) | .218    |      |         |         |
| 23   |         |         | .178    | .156    |      | .278(3) |         |
| 24   | .121(2) | .486(3) | .154    |         |      | .082    |         |
| 25   |         | .202    | .180    |         |      |         |         |
| 26   |         | .106    | .195    | .475(3) |      | .119(2) |         |
| 27   |         | .017    |         | .179    |      | .040    |         |
| 28   | .211(4) | .088    |         | .163    |      |         |         |
| 29   | .132    | MSG     | .338(3) | .151    |      |         |         |
| 30   | .002    | MSG     | .325    | .003    |      | .363(3) |         |
| 31   | .064    |         | .127    |         |      |         |         |

Daily (in) 0.119 0.191 0.216 0.169 0.099 0.063  
avg. (mm) 3.02 4.85 5.49 4.29 2.51 1.60

Note: Cumulative values are followed by the number of days represented by the measurement.  
E indicates estimated value.

Daily Pan Evaporation      ARS W-3 Watershed near Danville, Vermont  
X-3 evaporation pan located at the NOAA-ARS Snow Research Station (Daily values are in mm)

| Date | 1968    |        |         |         | Date | 1970  |         |         |         | Date    |        |        |        |      |
|------|---------|--------|---------|---------|------|-------|---------|---------|---------|---------|--------|--------|--------|------|
|      | May     | June   | July    | Aug.    |      | Sept. | Oct.    | May     | June    |         | July   | Aug.   | Sept.  | Oct. |
| 1    |         |        | 9.4(3)  | 3.6     |      | 1     |         | 14.5(3) | 0       |         |        | 5.9    | .7     |      |
| 2    |         |        | 5.3     | 3.7     |      | 2     |         | 3.4     | 4.0     |         |        | 4.7    | .9     |      |
| 3    |         | 7.6(3) | 8.1     |         |      | 3     |         | 5.5     |         | 15.5(3) |        | 4.6    |        |      |
| 4    |         | 3.4    | 6.7     |         |      | 4     |         | 5.7     |         | 4.7     | 0      |        |        |      |
| 5    |         | 4.6    | 4.4     | 11.4(3) |      | 5     |         | 4.9     |         | 5.1     |        |        | 1.8(3) |      |
| 6    |         | 4.8    | 4.3     | 5.1     |      | 6     |         |         | 11.4(4) | 3.4     |        |        | 1.2    |      |
| 7    | 5.5     | 5.1    |         | .1      |      | 7     |         |         | 6.8     | 3.7     |        |        | 1.3    |      |
| 8    | 4.8     |        | 6.6(2)  | 3.2     |      | 8     |         | 10.5(3) | 2.6     |         | 3.8(4) | .7     |        |      |
| 9    | 4.5     |        | 4.7     | 3.9     |      | 9     |         | 4.1     | 4.5     |         | 1.6    | .8     |        |      |
| 10   | 2.4     | 9.1(3) | 5.8     |         |      | 10    |         | 5.1     | 4.3     | 12.5(3) | .4     |        |        |      |
| 11   |         | 2.3    | 3.7     |         |      | 11    |         | 5.9     |         | 4.3     | 1.6    |        |        |      |
| 12   |         | .9     | 5.0     | 15.0(3) |      | 12    |         | 7.4     |         | 4.3     |        |        | 4.9(3) |      |
| 13   | 8.6(3)  | .5     | 6.5     | 4.4     |      | 13    |         |         | 17.5(3) | 6.4     |        | .1     |        |      |
| 14   | 5.8     | 2.7    |         | 4.0     |      | 14    |         |         | 5.3     | 4.5     | 9.9(3) | 0      |        |      |
| 15   | 6.1     |        | 7.6(2)  | 6.4     |      | 15    |         | 21.1(3) | 4.5     |         | 2.1    | .2     |        |      |
| 16   | 5.8     |        | 4.8     | 5.5     |      | 16    |         | 5.1     | 1.5     |         | .4     | 2.7    |        |      |
| 17   | 3.8     | 9.4(3) | 4.9     |         |      | 17    |         | 4.1     | 2.5     | 16.0(3) | 2.3    |        |        |      |
| 18   |         | .8     | 3.1     |         |      | 18    |         | 2.8     |         | 8.2     | .7     |        |        |      |
| 19   |         | 3.0    | 3.9     | 11.8(3) |      | 19    |         | 3.0     |         | 7.7     |        | 5.9(3) |        |      |
| 20   | 4.7(3)  | 1.1    | 8.2     | 2.5     |      | 20    | 2.8     |         | 18.2(3) | 3.1     |        | 1.3    |        |      |
| 21   | 0.6     | 5.1    |         | 2.3     |      | 21    | 6.8     |         | 4.1     | 2.4     | 5.4(3) |        |        |      |
| 22   | 2.5     |        | 11.0(2) | 3.6     |      | 22    | 5.0     |         | 15.7(3) | 4.1     | .2     |        |        |      |
| 23   | 2.7     |        | 8.3     | 2.9     |      | 23    |         | 5.0     | 4.6     |         | 1.5    |        |        |      |
| 24   | 3.8     | 3.2(3) | 5.6     | 2.1     |      | 24    |         | 5.3     | 4.7     | 8.2(3)  | 4.2    |        |        |      |
| 25   |         | 0      | .8      |         |      | 25    | 15.3(3) | 6.7     |         | 4.3     | 1.8    |        |        |      |
| 26   |         | 1.5    | 6.0     | 7.3(2)  |      | 26    | 1.4     | 5.6     |         | 2.6     |        |        |        |      |
| 27   | 16.1(3) | 2.2    | 5.9     | 5.2     |      | 27    | .4      |         | 15.0(3) | 3.5     |        |        |        |      |
| 28   | 4.8     | 1.3    |         | 2.9     |      | 28    | 4.4     |         | 6.5     | 5.9     | 8.6(3) |        |        |      |
| 29   | 5.9     |        | 9.1(2)  | 2.3     |      | 29    | 5.0     |         | 9.7(3)  | 4.9     | 1.3    |        |        |      |
| 30   |         |        | 4.5     | 2.8     |      | 30    |         | 3.5     | 3.2     |         | 1.2    |        |        |      |
| 31   | 5.0(2)  |        | 3.9     |         |      | 31    |         |         | 5.6     | 11.8(3) |        |        |        |      |

|            |      |       |       |       |       |      |       |       |       |       |       |       |
|------------|------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|
| Daily avg. | (mm) | 3.74  | 2.45  | 4.79  | 3.73  | (mm) | 4.11  | 4.83  | 4.38  | 4.45  | 2.08  | 1.12  |
|            | (in) | 0.147 | 0.096 | 0.189 | 0.147 | (in) | 0.162 | 0.173 | 0.173 | 0.175 | 0.082 | 0.044 |

Note: Cumulative values are followed by the number of days represented by the measurement.  
E indicates estimated value.

Daily Pan Evaporation      ARS W-3 Watershed near Danville, Vermont  
X-3 evaporation pan located at the NOAA-ARS Snow Research Station (Daily values are in mm)

| Date | 1971 |         |         |         | 1972   |        |    |  | Date    | May     | June    | July | Aug. | Sept. | Oct.    |
|------|------|---------|---------|---------|--------|--------|----|--|---------|---------|---------|------|------|-------|---------|
|      | May  | June    | July    | Aug.    | Sept.  | Oct.   |    |  |         |         |         |      |      |       |         |
| 1    |      |         | 4.8     |         | 4.9    | 3.1    | 1  |  |         | 2.8     | 2.3     |      |      |       | 4.0(3)  |
| 2    |      |         | 4.8     | 1.4(4)  | 3.3    |        | 2  |  |         | 4.2     |         |      |      |       | .8      |
| 3    |      | 2.8     |         | 2.2     | 2.5    |        | 3  |  | 8.3     | 4.4     |         |      |      |       | 1.0     |
| 4    |      | 1.2     |         | 2.E     |        | 7.8(3) | 4  |  |         | 1.8     |         |      |      |       | 1.7     |
| 5    |      |         |         | 4.2     |        | 1.7    | 5  |  | 8.1(2)  |         | 14.0(4) |      |      |       | 2.7     |
| 6    |      |         | 23.6(4) | 5.3     |        | .7     | 6  |  | 3.1     |         | 4.2     |      |      |       |         |
| 7    |      | 15.6(3) | 3.8     |         | 7.7(4) |        | 7  |  | 3.2     | 15.6(3) | 3.9     |      |      |       |         |
| 8    |      | 4.4     | 7.1     |         | 2.1    | 5.0(2) | 8  |  |         | 0       | 2.1     |      |      |       |         |
| 9    |      | 5.8     | 5.4     | 15.3(3) | 3.4    |        | 9  |  |         | 2.5     |         |      |      |       | 12.8(3) |
| 10   |      | 7.9     |         | 4.8     | 5.4    |        | 10 |  | 8.9(3)  | 4.1     |         |      |      |       | 1.2     |
| 11   |      | 7.8     |         | 4.3     |        | 0(3)   | 11 |  | 4.1     | 2.2     |         |      |      |       | 1.1     |
| 12   |      |         | 21.5(3) | 7.0     |        | 1.2    | 12 |  | 3.6     |         | 9.2(3)  |      |      |       | .5      |
| 13   |      |         | 6.4     | 6.3     | 1.9(3) | 1.9    | 13 |  | 3.6     |         | 1.8     |      |      |       |         |
| 14   |      | 17.8(3) | 4.1     |         | .3     | .8     | 14 |  | 3.9     | 9.7(3)  | .6      |      |      |       |         |
| 15   |      | 4.6     | 3.9     |         | 0      | .2     | 15 |  |         | 3.1     | 1.2     |      |      |       |         |
| 16   |      | 5.0     | 4.3     | 13.0(3) | 1.9    |        | 16 |  |         | 4.5     |         |      |      |       | 8.9(4)  |
| 17   |      | 4.5     |         | 4.9     | 3.9    |        | 17 |  | 11.5(3) | 2.1     |         |      |      |       |         |
| 18   |      | 4.9     |         | 3.4     |        | 4.3(3) | 18 |  | 4.5     | 1.0     | 6.2(3)  |      |      |       |         |
| 19   |      |         | 16.8(3) | 3.6     |        | 1.2    | 19 |  | 6.4     |         | 2.7     |      |      |       |         |
| 20   |      |         | 1.9     | 5.2     | 4.6(3) | .9     | 20 |  | 0       |         | 4.0     |      |      |       |         |
| 21   |      | 16.2(3) |         |         | .2     | 1.1    | 21 |  |         | 8.5(3)  | 3.6     |      |      |       |         |
| 22   |      | 4.5     | 4.1(2)  |         | 2.0    | 1.3    | 22 |  |         | 3.6     | 1.8     |      |      |       |         |
| 23   |      | 4.8     | 4.6     | 21.9(3) | 2.2    |        | 23 |  |         | 4.0     |         |      |      |       |         |
| 24   |      | 4.9     |         | 4.8     | 3.5    | 2.2(2) | 24 |  | 0(3)    | 1.8     |         |      |      |       |         |
| 25   |      | 4.4     |         | 3.7     |        |        | 25 |  | 2.4     | 2.0     | 7.5(3)  |      |      |       |         |
| 26   |      |         | 10.8(3) | 2.5     |        | 1.0(2) | 26 |  | 5.6     |         | .4      |      |      |       |         |
| 27   |      |         | 5.0     | 2.1     | 8.9(3) | .7     | 27 |  | 2.7     |         | .1      |      |      |       |         |
| 28   |      | 15.7(3) | 6.9     |         | 1.4    | .9     | 28 |  | 1.5     | 15.5(3) | 4.5     |      |      |       |         |
| 29   |      | 5.1     | 6.0     |         | .6     | 2.2    | 29 |  |         | 4.0     | 2.7     |      |      |       |         |
| 30   |      | 2.9     |         | 8.E(3)  | .6     |        | 30 |  |         |         |         |      |      |       |         |
| 31   |      |         |         | 4.5     |        |        | 31 |  |         |         |         |      |      |       |         |

Daily (mm)      5.03    5.03    3.95    2.04    1.32    3.48    3.50    2.59    2.04  
 avg. (in)      0.198    0.198    0.156    0.080    0.052    0.137    0.138    0.102    0.080

Note: Cumulative values are followed by the number of days represented by the measurement.  
 E indicates estimated value.



Daily Pan Evaporation ARS W-3 Watershed near Danville, Vermont  
X-3 evaporation pan located at the NOAA-ARS Snow Research Station (Daily values are in mm)

1973

| Date | May    | June    | July    | Aug.    | Sept.   | Oct.    |
|------|--------|---------|---------|---------|---------|---------|
| 1    |        | 5.9     |         | 3.2     |         | 9.5(3)  |
| 2    |        |         | 9.6(3)  | 2.3     |         | 2.0     |
| 3    | 1.3    |         |         |         |         | 0       |
| 4    | 3.0    | 13.2(3) |         | 6.5(2)  | 15.3(4) |         |
| 5    |        | 0       | 10.9(3) |         | 3.2     | 0(2)    |
| 6    |        | 0       | 6.4     | 11.3(2) | 8.2     |         |
| 7    | 6.7(3) | 1.1     |         | 2.3     | 3.9     |         |
| 8    | 4.0    | 5.2     |         | 3.3     |         | 11.0(3) |
| 9    | 2.9    |         | 18.8(3) | 2.8     |         | 2.2     |
| 10   | 0.1    |         | 7.8     | 3.3     | 9.2(3)  | 0.9     |
| 11   | 0.6    | 18.3(3) | 3.0     |         | 1.7     | 2.2     |
| 12   |        | 5.9     | 8.1     |         | 2.1     | 2.2     |
| 13   |        | 6.9     | 5.5     | 15.6(3) | 2.9     |         |
| 14   | 7.5(3) | 4.1     |         | 3.4     | 2.0     |         |
| 15   | 1.6    | 6.4     |         | 3.8     |         | 5.2(3)  |
| 16   | 1.2    |         | 9.1(3)  | 2.4     |         | 0.8     |
| 17   | 4.3    |         | 4.6     | 3.3     |         | 0       |
| 18   | 4.8    | 14.4(3) | 4.8     |         | 4.2(4)  | 0.9     |
| 19   |        | 2.3     | 4.4     |         | 0.6     | 1.9     |
| 20   |        | 2.8     | 5.5     | 11.7(3) | 2.1     |         |
| 21   | 2.8(3) | 4.0     |         | 4.8     | 0.4     |         |
| 22   | 1.5    | 4.9     |         | 5.3     |         |         |
| 23   | 0.5    |         | 13.1(3) | 5.8     |         | 1.6(4)  |
| 24   | 2.3    |         | 7.0     | 4.4     | 2.5(3)  | 1.8     |
| 25   | 3.2    | 10.3(3) | 5.1     |         | 0       | 0.3     |
| 26   |        | 3.5     | 3.4     |         | 1.1     | 1.8     |
| 27   |        | 4.1     | 1.5     | 6.6(3)  | 1.2     |         |
| 28   |        | 3.3     |         | 4.6     | 1.3     |         |
| 29   | 8.5(4) | 4.1     |         | 5.6     |         | 5.5(3)  |
| 30   | 1.5    |         | 19.7(3) | 4.0     |         |         |
| 31   | 0.9    |         | 3.5     | 5.1     |         |         |

Daily (mm)  
avg. (in)

2.04 4.16 4.74 3.92 2.21 1.61  
0.080 0.164 0.187 0.154 0.087 0.063

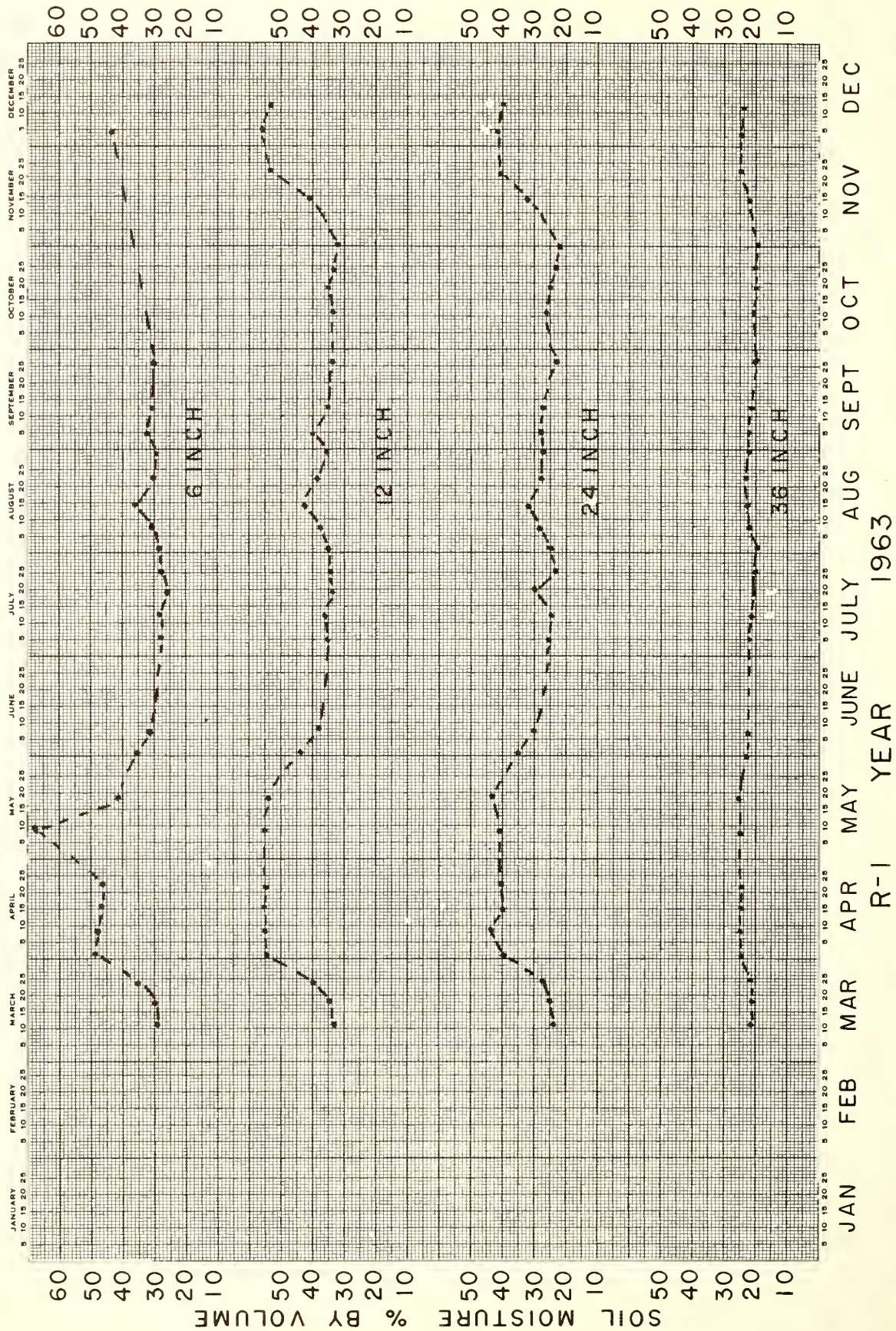
Note: Cumulative values are followed by the number of days represented by the measurement.  
E indicates estimated value.

## APPENDIX E

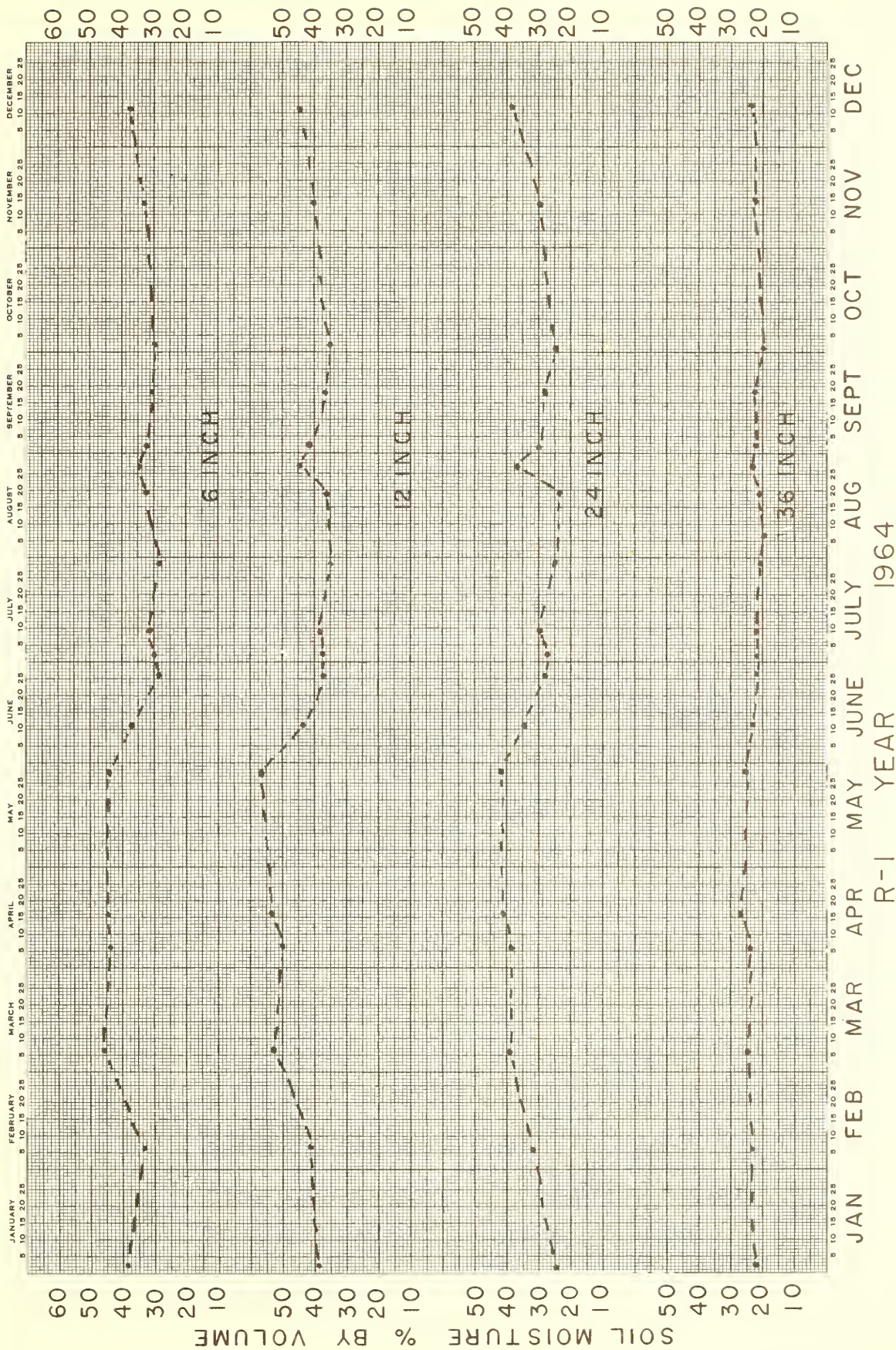
### SOIL-MOISTURE DATA

This appendix contains plots of the available soil-moisture data for the W-3 watershed. Soil-moisture measurements were made at stations R-1, R-3, and R-6 with a neutron-scattering probe. Readings were normally made on a weekly basis, weather and soil conditions permitting. Soil-moisture measurements were taken from 1963 through 1969 (station R-6 discontinued in 1967). The plots show soil-moisture-by-volume readings taken at 6, 12, 24, and 36 inches. Further information on the method of measurement, the quality of the data, and the degree to which the data represents soil-moisture conditions over the W-3 watershed is contained in chapter III.7.

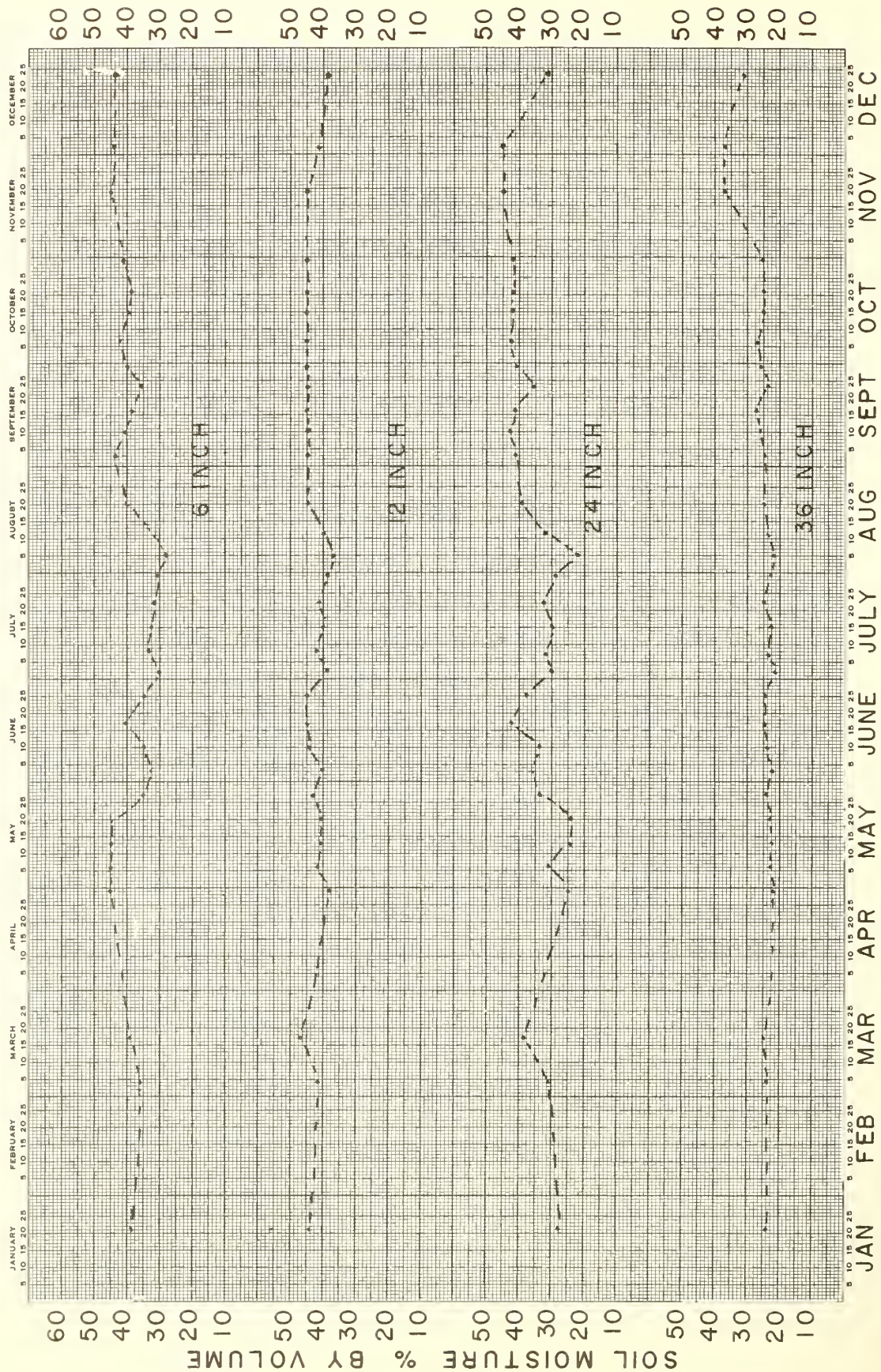












R-1 YEAR 1965

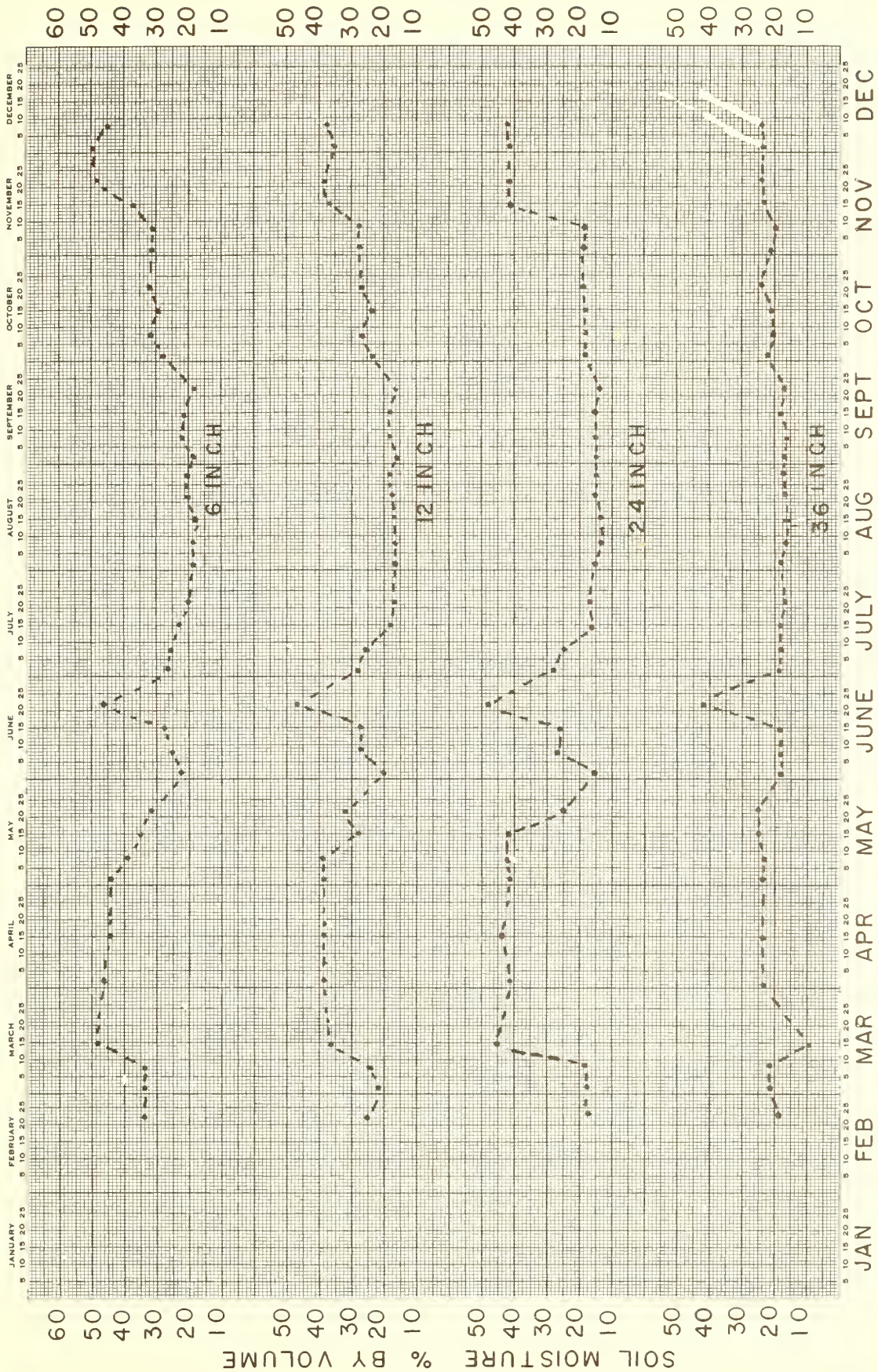






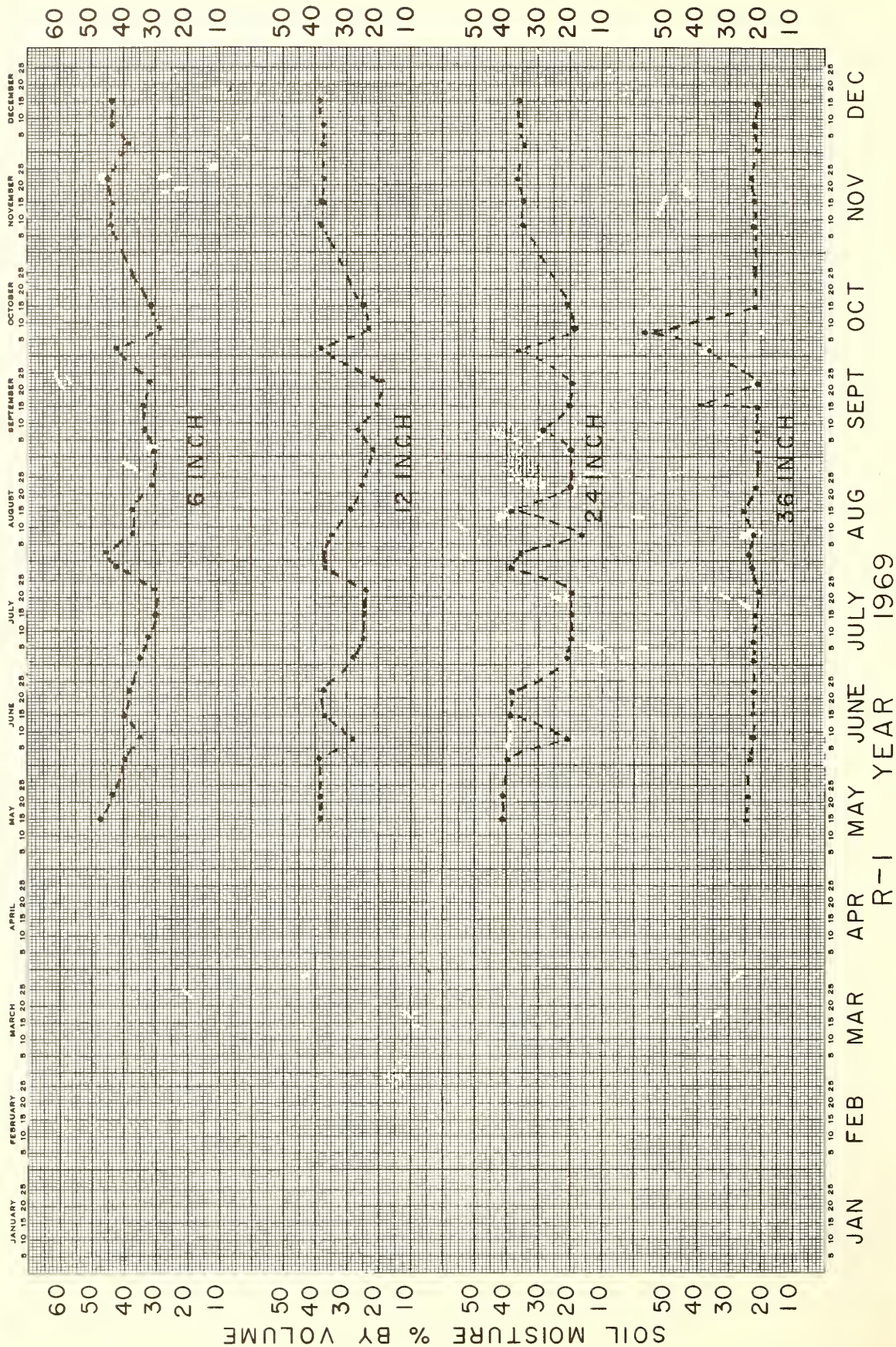




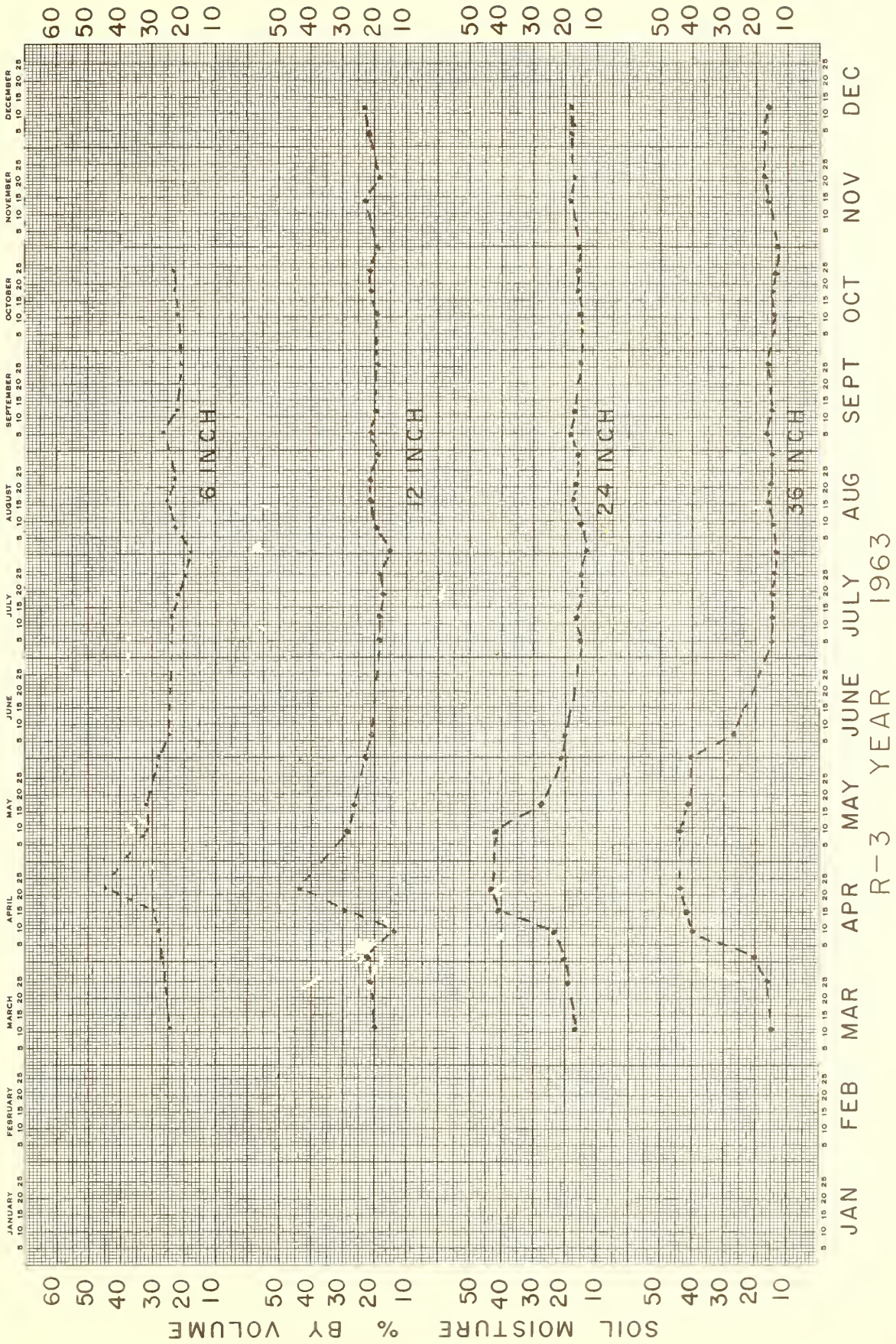


R-1 YEAR 1968

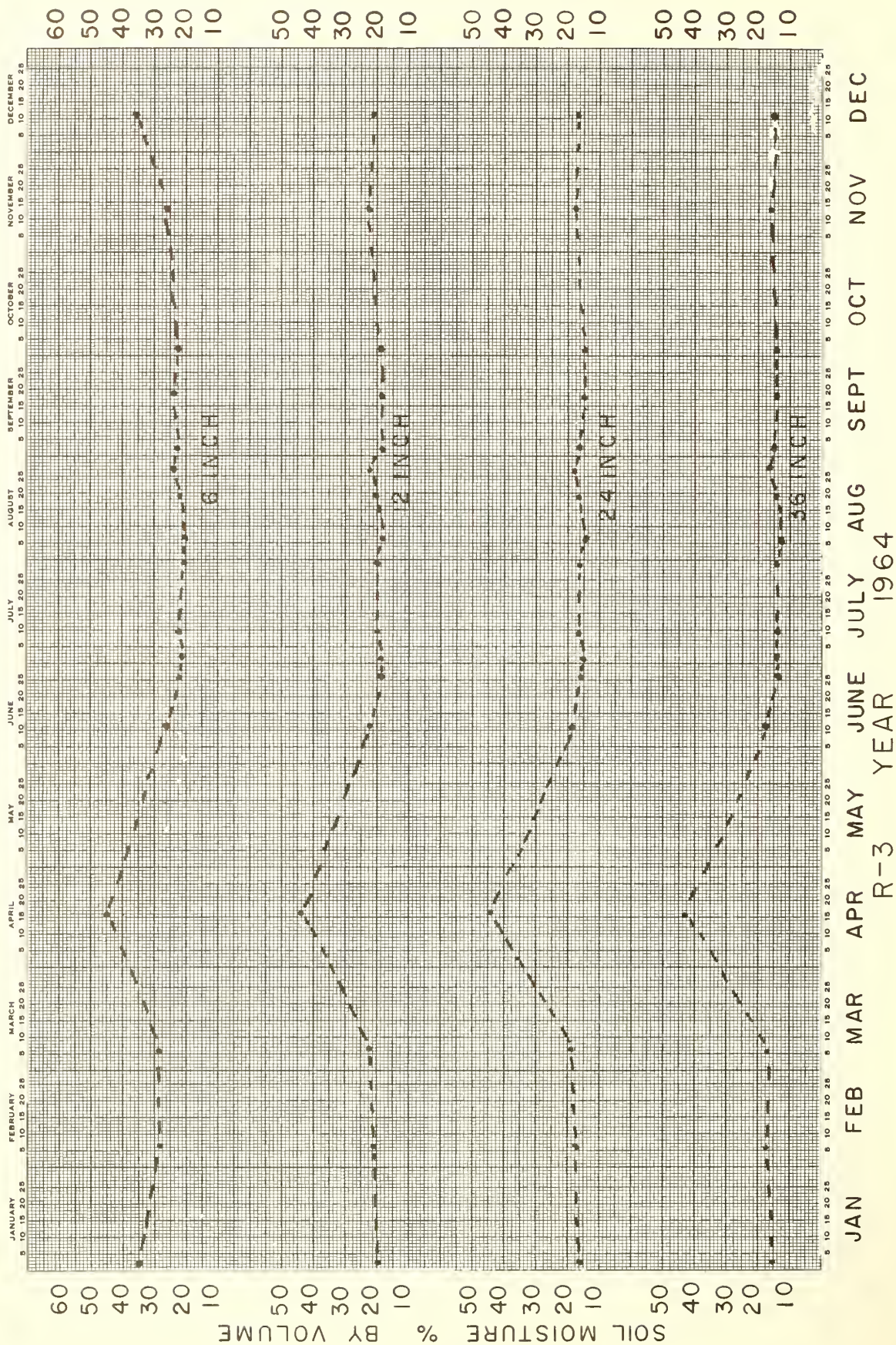




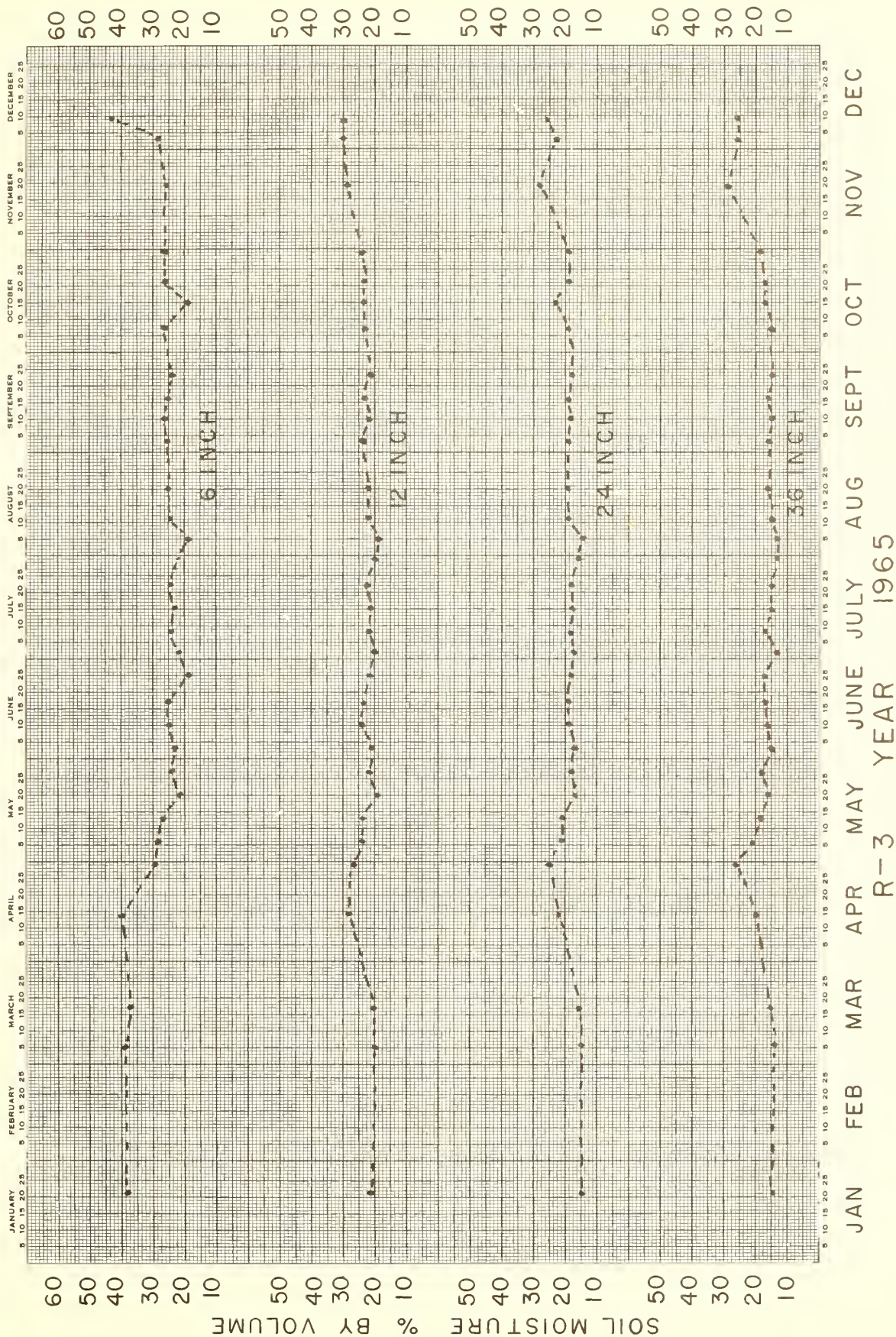




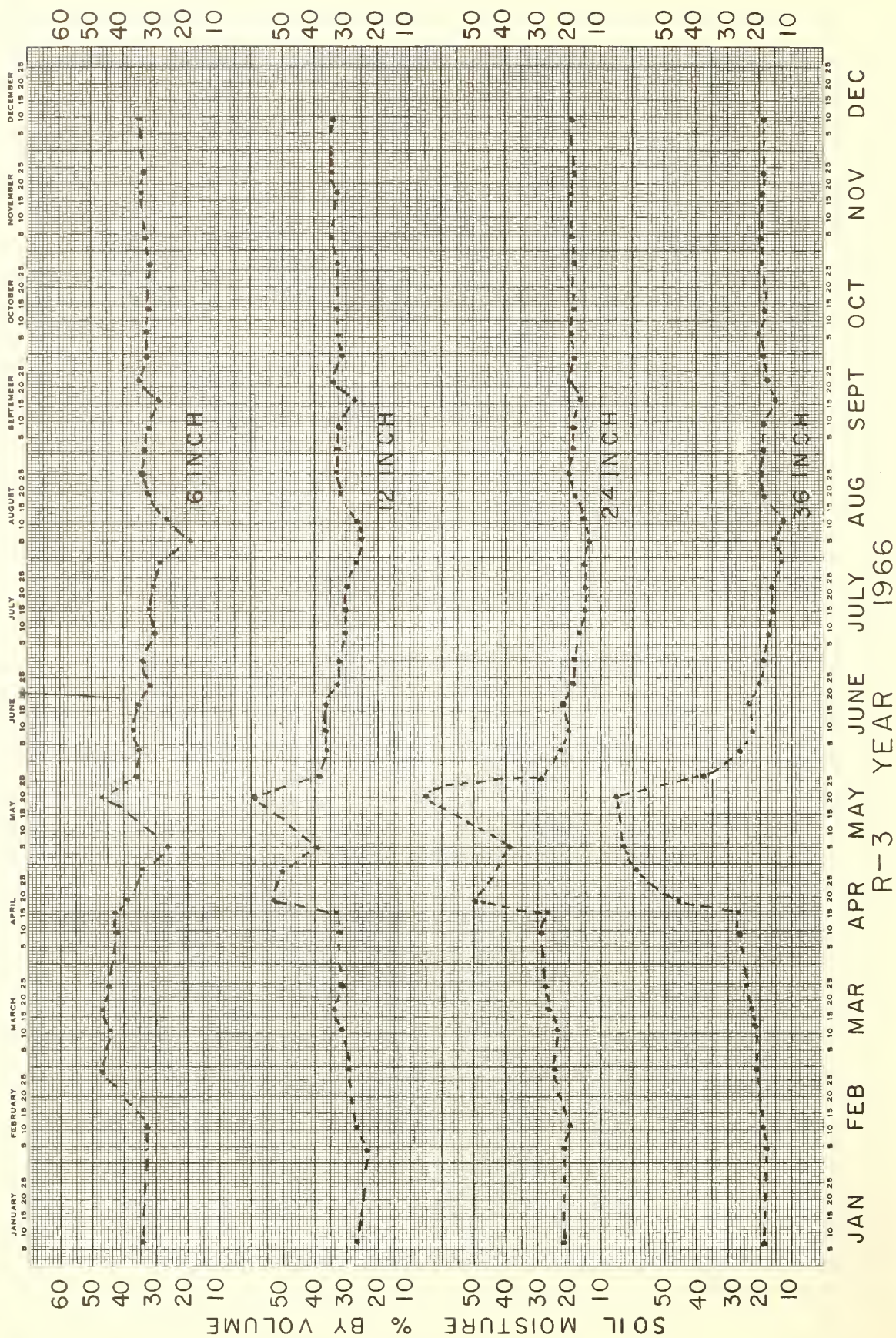




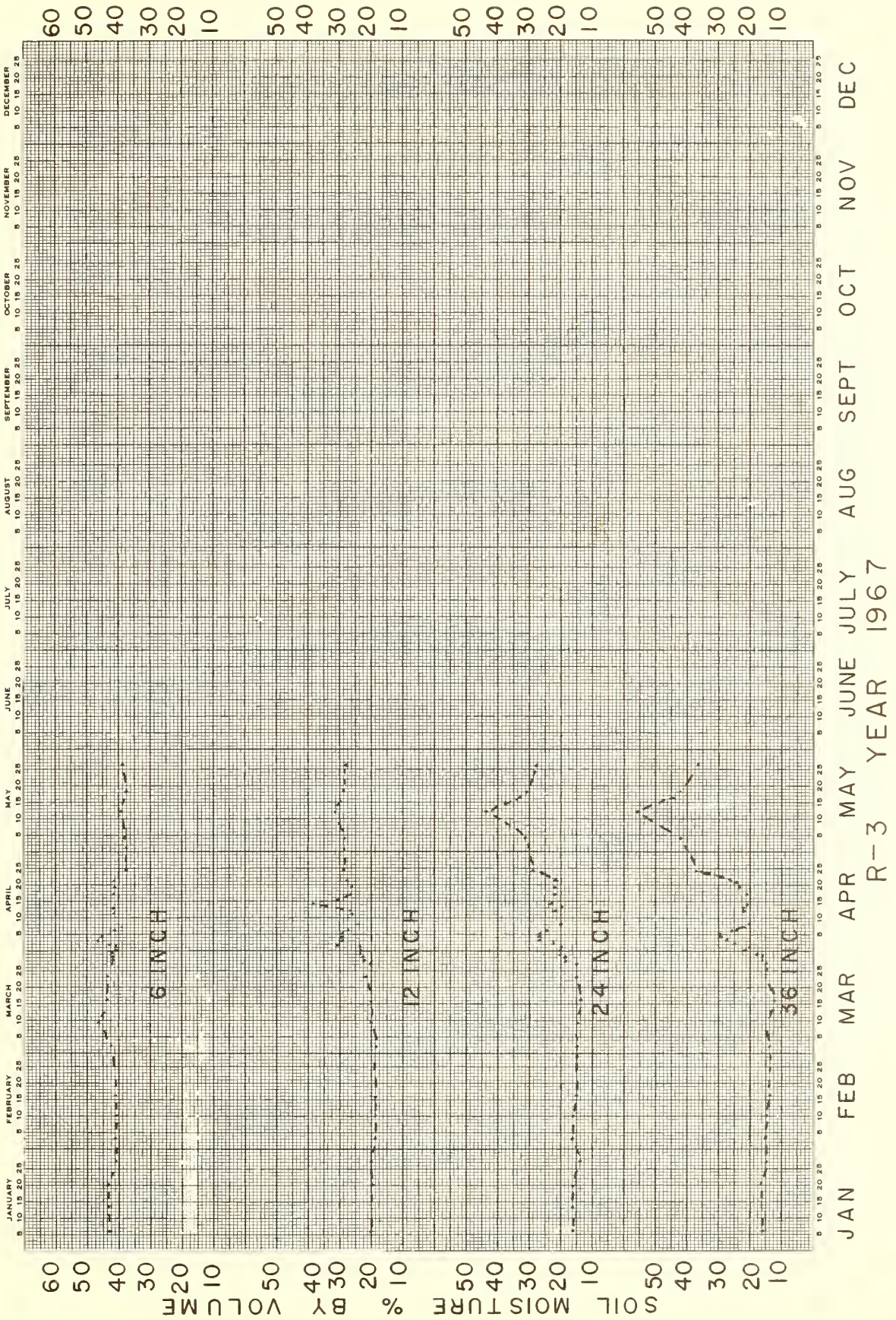




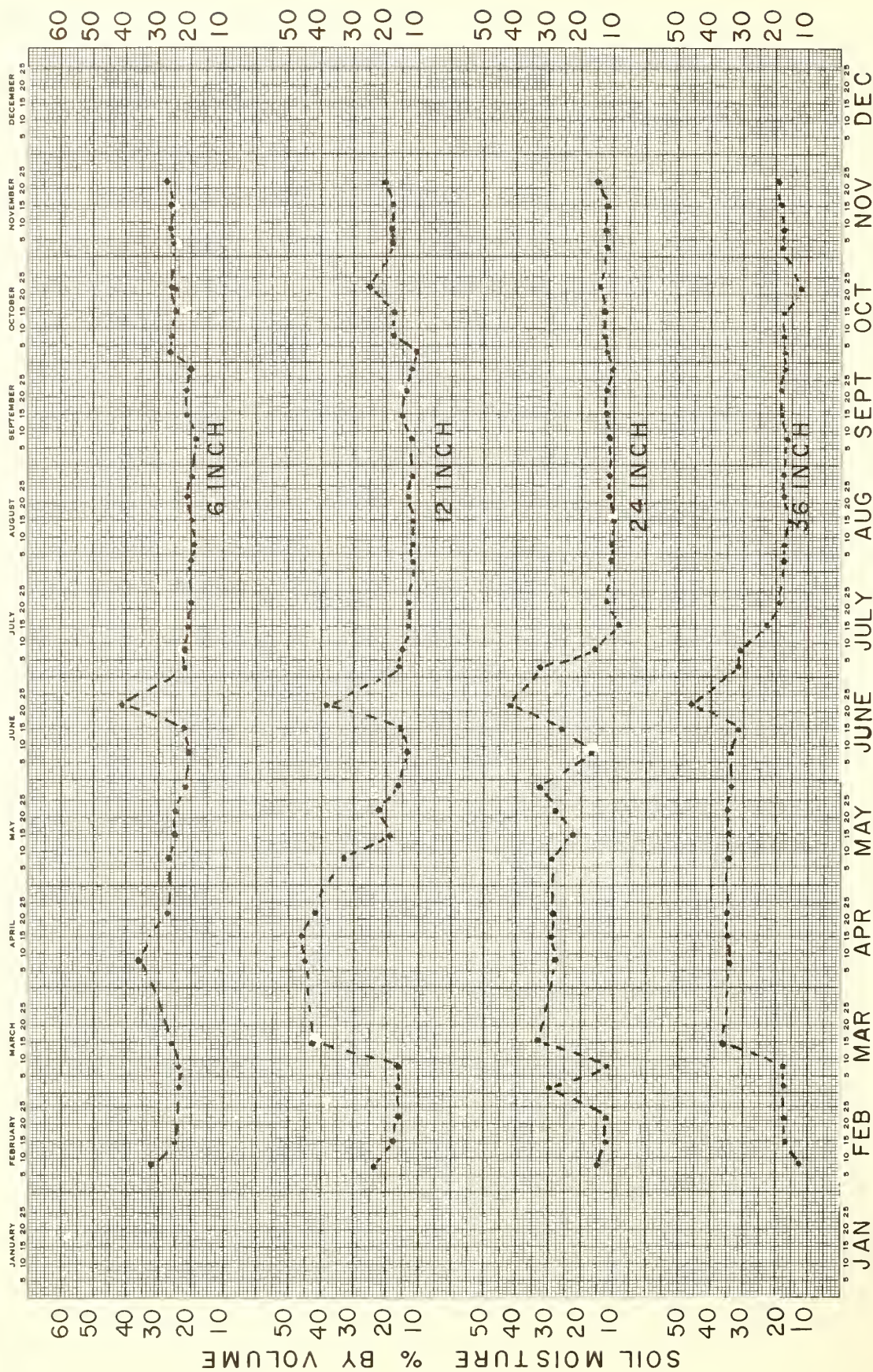






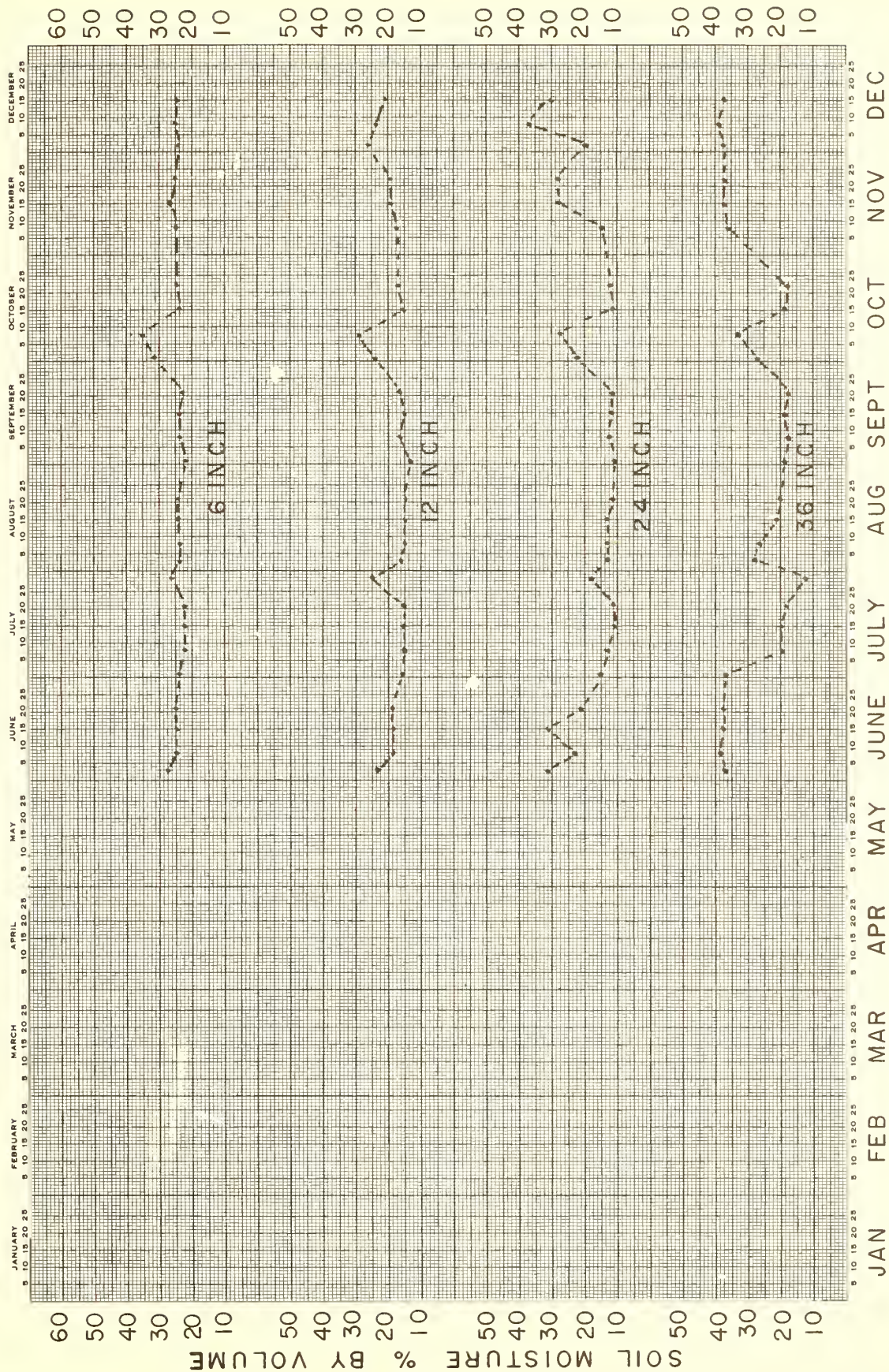






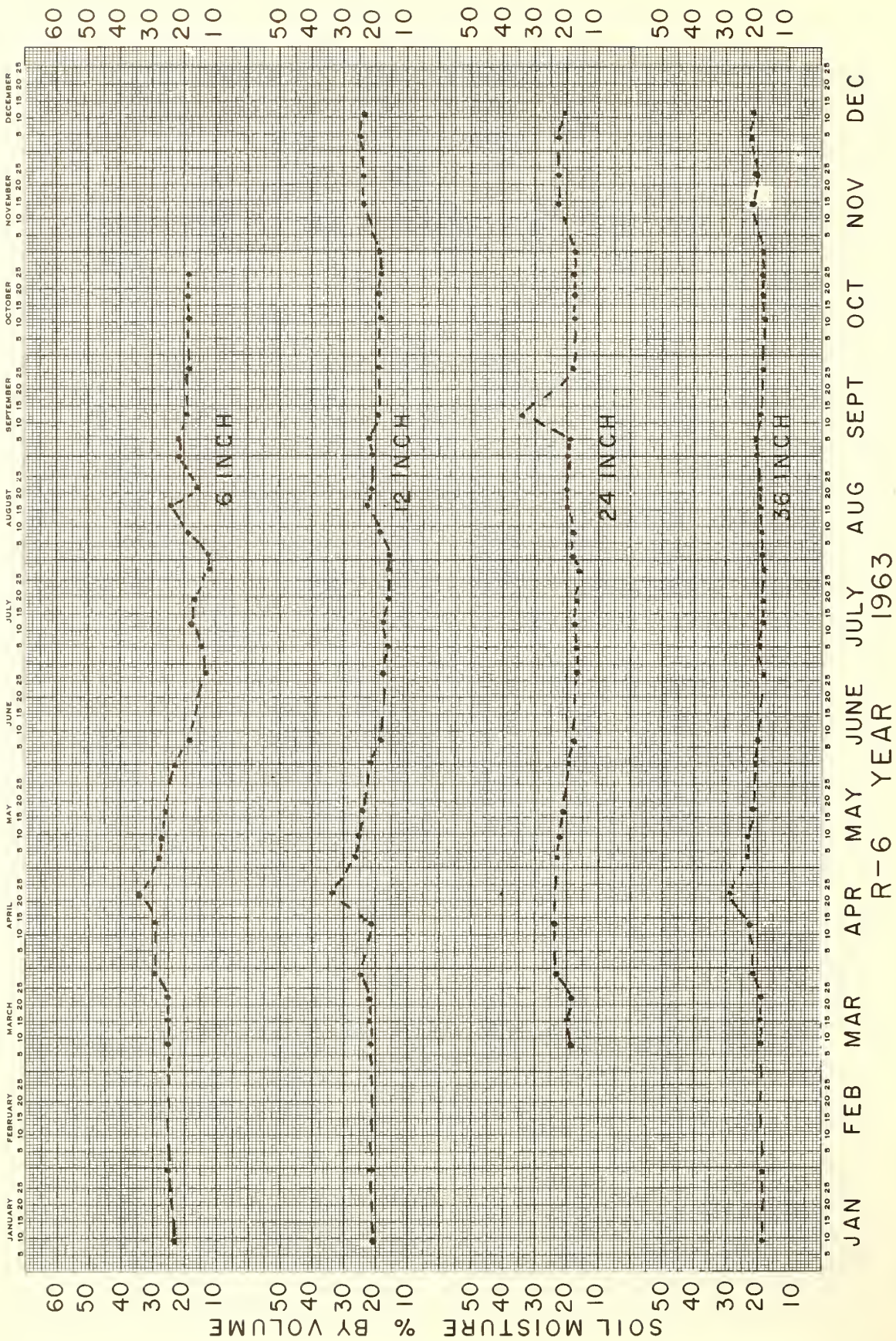
R-3 YEAR 1968



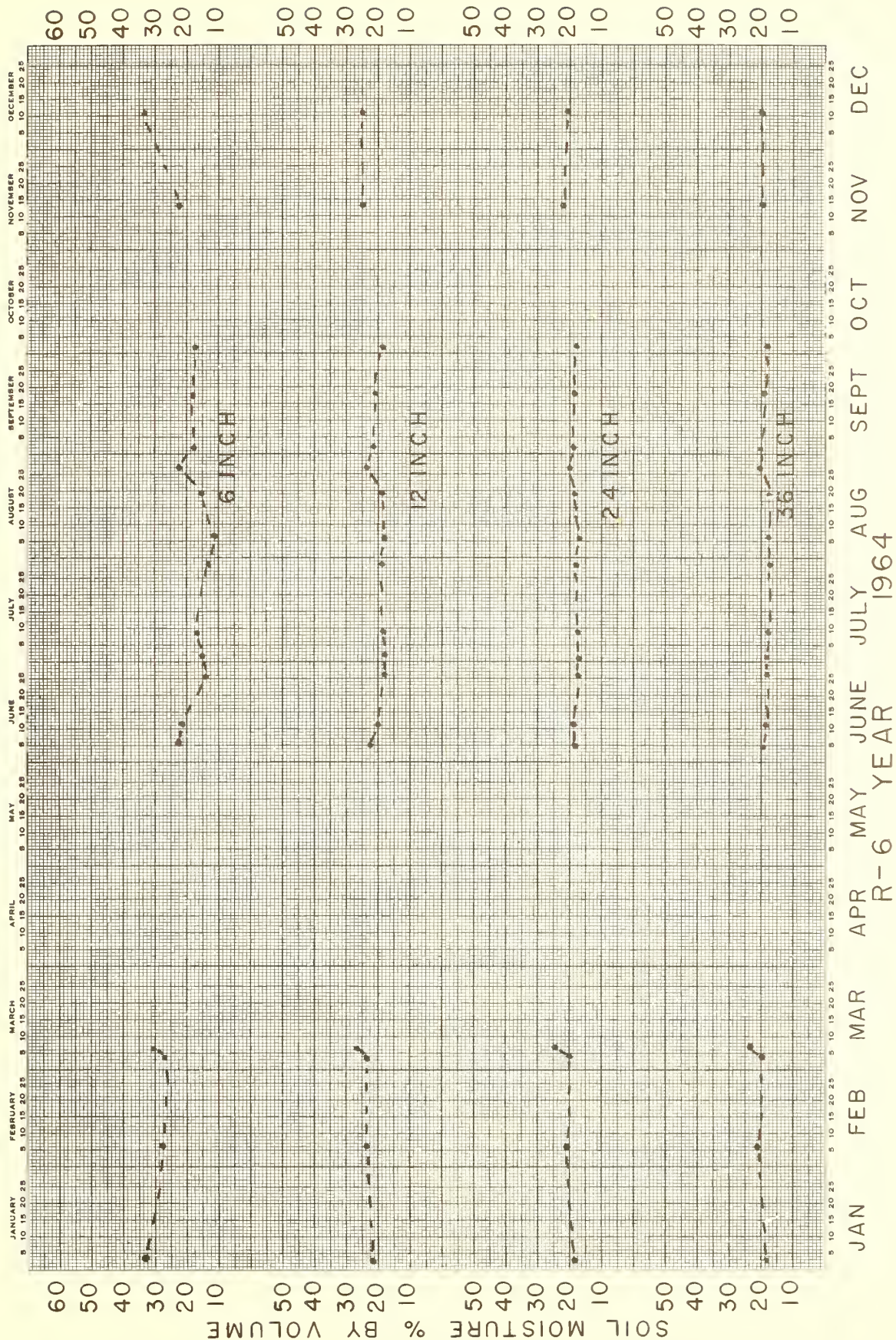


R-3 YEAR 1969

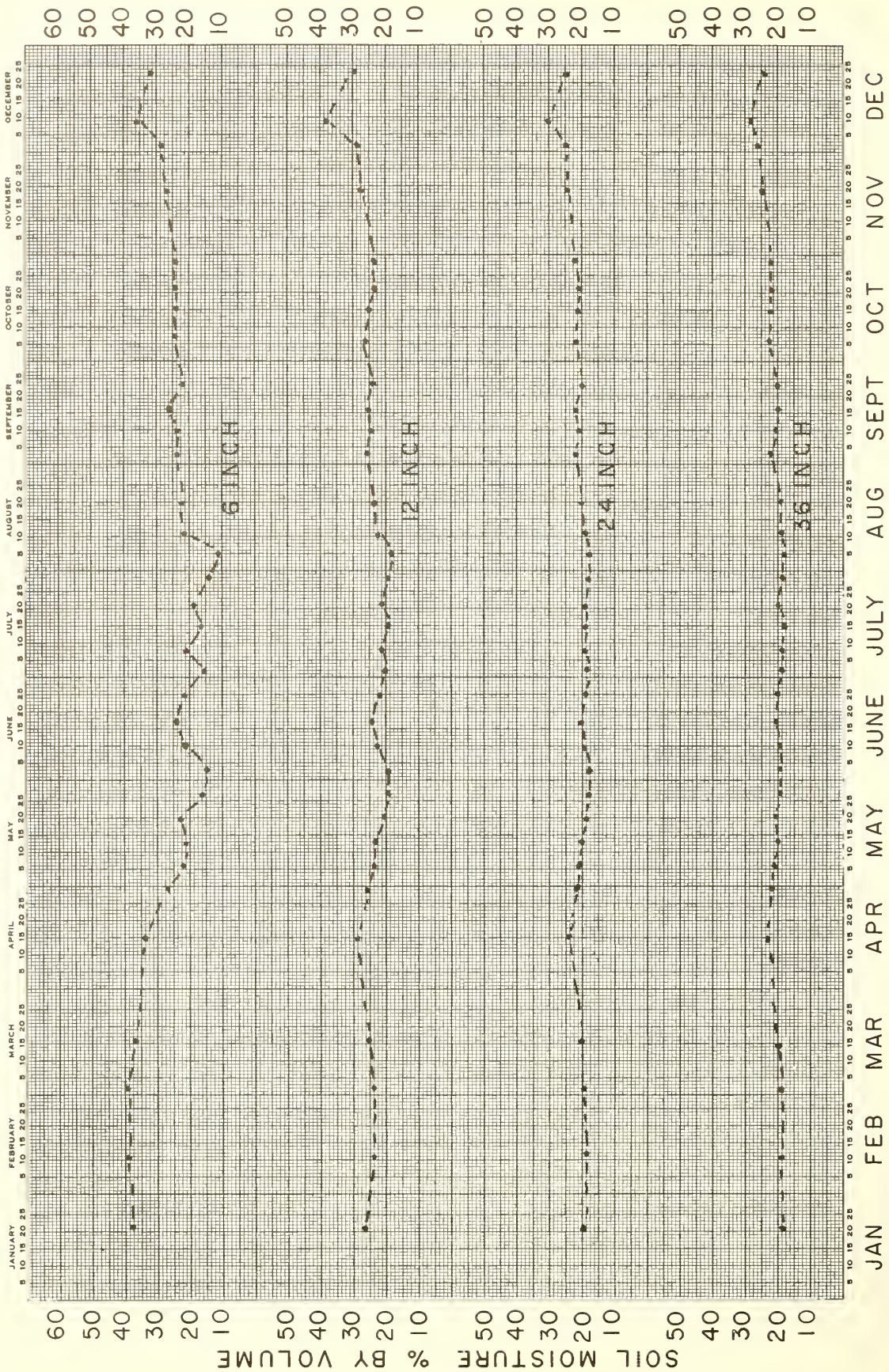




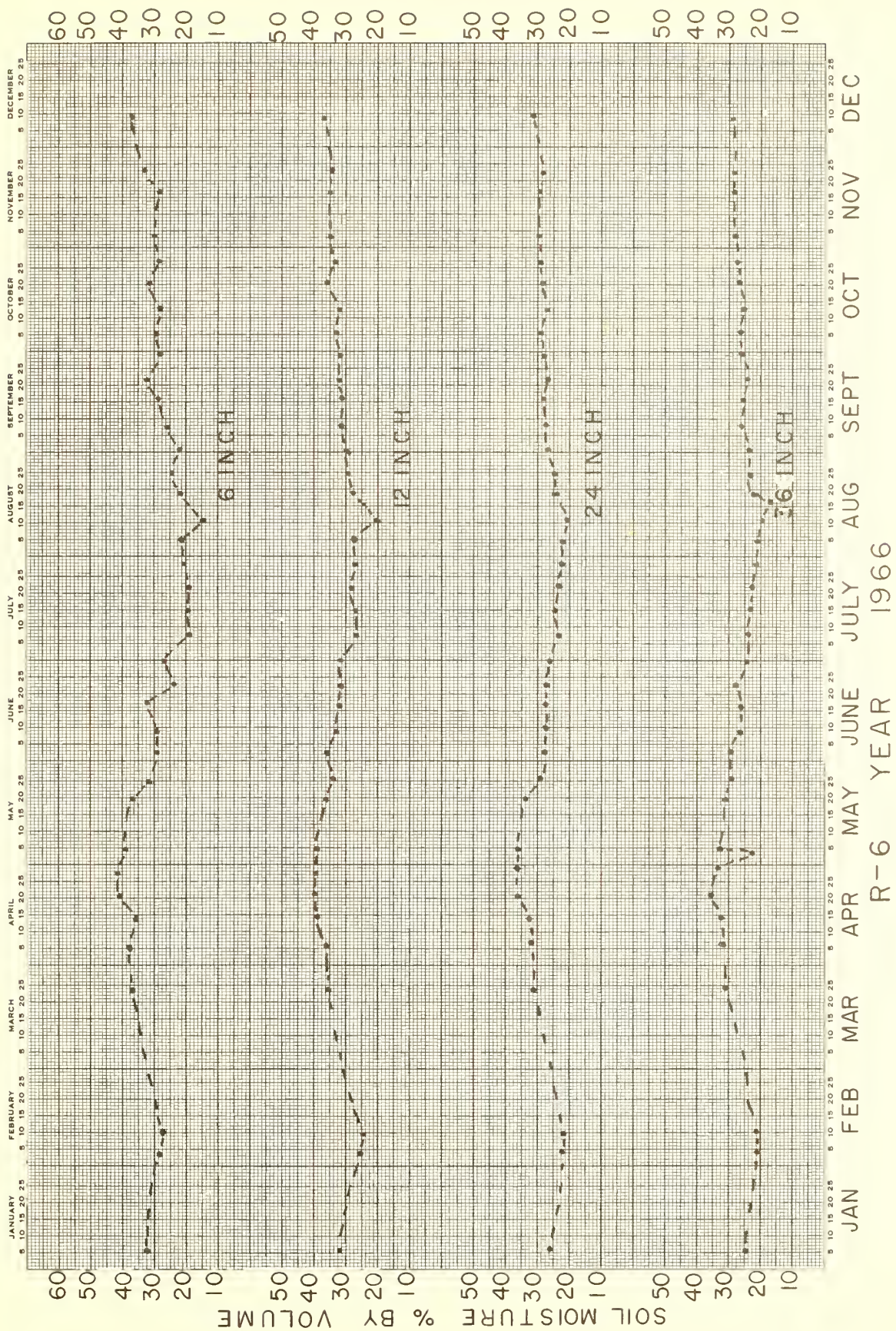




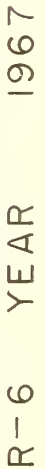












## APPENDIX F

### SUMMARY OF DATA FROM THE NOAA-ARS SNOW RESEARCH STATION

This appendix contains a summary of the data collected at the NOAA-ARS Snow Research Station. The snow research station is located at an elevation of 1812 feet adjacent to the W-3 watershed (see Fig. 2.1). The data begins in December 1968 and continues through September 1974, except for the period May 1969 through October 1969 when only precipitation data were collected. The data are summarized by tabulating daily and monthly averages or totals of all continuously recorded variables. The magnetic tape contains hourly values of all of these variables except for snow pillow water-equivalent. In addition, the observation time and data values are tabulated for all manually measured variables. The snow courses, snow stakes, and snow surface density are measured manually. Detailed information on the instrumentation and the quality of the snow research station data is in chapter IV.



DAILY SUMMARY OF DATA--NOAA--ARS SNOW RESEARCH STATION, DANVILLE,VFRMONT-- 12/68

| DAY              | ORS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW              |         | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON<br>BAKER |          | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |      |  |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|---------------------|---------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------|----------|----------------|----------|----------|------|--|
|                  |              |                              |                  |                       |                      | WE AT<br>2400<br>IN | AT<br>F |                |                |                |                    |                 |          |              |          | QA<br>LY          | OA<br>LY |                |          |          |      |  |
| 1                |              |                              |                  |                       |                      | 1.9                 | 27.     | 10.            | 19.4           | .0994          | 1.4                | 92.             | .74      | 538.         | 539.     |                   | M        |                | 0.00     |          |      |  |
| 2                | 1030         | 4.8                          | 2.7              | 6.9                   |                      | 2.1                 | 35.     | 25.            | 31.0           | .1732          | 1.3                | 44.             | .70      | 636.         | 634.     |                   | M        |                | .10      |          |      |  |
| 3                | 1015         | 4.3                          | 2.5              | 6.2                   | .30                  | 2.3                 | 33.     | 26.            | 29.8           | .1575          | 1.2                | 43.             | .77      | 624.         | 628.     |                   | M        |                | 0.00     |          |      |  |
| 4                | 1030         | 7.6                          | 3.2              | 9.5                   | .13                  | 3.6                 | 33.     | 27.            | 30.0           | .1663          | 2.7                | 43.             | .84      | 617.         | 629.     |                   | M        |                | 1.45     |          |      |  |
| 5                | 1015         | 11.2                         | 4.5              | 13.4                  | .11                  | 4.3                 | 33.     | 26.            | 29.9           | .1605          | 4.7                | 73.             | .86      | 603.         | 607.     |                   | M        |                | .52      |          |      |  |
| 6                | 0900         | 15.8                         | 4.4              | 18.8                  | .09                  | 4.7                 | 26.     | 18.            | 23.5           | .1138          | 5.2                | 131.            | .90      | 562.         | 503.     |                   | M        |                | .44      |          |      |  |
| 7                |              |                              | 4.7              |                       |                      | 4.7                 | 24.     | 17.            | 20.2           | .0957          | 3.8                | 130.            | .88      | 502.         | 448.     |                   |          | 24.7           | .04      |          |      |  |
| 8                |              |                              | 4.7              |                       |                      | 4.7                 | 19.     | 9.             | 15.4           | .0799          | 6.6                | 106.            | .90      | 501.         | 499.     |                   |          | 22.5           | .05      |          |      |  |
| 9                | 1030         | 15.8                         | 4.3              | 18.1                  | .09                  | 4.6                 | 8.      | -4.            | .4             | .0365          | 7.8                | 135.            | .85      | 402.         | 391.     |                   |          | 19.3           | .02      |          |      |  |
| 10               | 1115         | 15.7                         | 4.2              | 17.7                  | .09                  | 4.6                 | 4.      | -10.           | -4.1           | .0294          | 4.2                | 195.            | .77      | 307.         | 281.     |                   |          | 11.1           | 0.00     |          |      |  |
| 11               | 1130         | 15.5                         | 5.2              | 17.2                  | .11                  | 4.6                 | 12.     | -10.           | 3.0            | .0419          | 1.3                | 132.            | .80      | 430.         | 405.     |                   |          | 8.1            | 0.00     |          |      |  |
| 12               | 0900         | 15.2                         | 4.6              | 17.3                  | .13                  | 4.6                 | 32.     | 7.             | 20.7           | .0942          | 1.4                | 121.            | .84      | 574.         | 501.     |                   |          | 21.1           | 0.00     |          |      |  |
| 13               | 0900         | 14.5                         | 5.1              | 16.0                  | .15                  | 4.7                 | 40.     | 28.            | 32.9           | .1588          | 2.0                | 103.            | .82      | 635.         | 586.     |                   |          | 30.6           | 0.00     |          |      |  |
| 14               |              |                              | 5.1              |                       |                      | 5.1                 | 34.     | 27.            | 30.7           | .1694          | 2.3                | 17.             | .65      | 560.         | 642.     |                   |          | 32.0           | .37      |          |      |  |
| 15               |              |                              | 5.4              |                       |                      | 5.4                 | 26.     | 3.             | 10.8           | .0627          | 13.4               | 44.             | .84      | 539.         | 533.     |                   |          | 25.3           | .63      |          |      |  |
| 16               | 1030         | 14.8                         | 4.4              | 16.8                  | .19                  | 5.3                 | 4.      | 1.             | 2.7            | .0423          | 9.5                | 109.            | .87      | 473.         | 436.     |                   |          | 11.5           | .07      |          |      |  |
| 17               | 1100         | 15.2                         | 5.4              | 16.5                  | .19                  | 5.1                 | 10.     | 2.             | 5.7            | .0477          | 5.9                | 96.             | .90      | 481.         | 465.     |                   |          | 7.9            | .06      |          |      |  |
| 18               | 1000         | 15.3                         | 5.8              | 16.7                  | .12                  | 5.1                 | 22.     | 9.             | 14.4           | .0611          | 4.7                | 153.            | .87      | 464.         | 414.     |                   |          | 12.8           | 0.00     |          |      |  |
| 19               | 0900         | 15.5                         | 5.7              | 17.3                  | .20                  | 5.2                 | 22.     | 11.            | 17.3           | .0775          | 2.8                | 146.            | .82      | 499.         | 441.     |                   |          | 15.5           | .20      |          |      |  |
| 20               | 1030         | 20.0                         | 6.7              | 22.0                  | .07                  | 5.3                 | 26.     | 19.            | 23.1           | .1251          | 2.1                | 43.             | .86      | 612.         | 593.     |                   |          | 23.7           | .40      |          |      |  |
| 21               |              |                              |                  |                       |                      | 5.4                 | 26.     | 22.            | 23.5           | .1260          | 5.5                | 64.             | .90      | 595.         | 581.     |                   |          | 26.4           | 0.00     |          |      |  |
| 22               |              |                              | 5.4              |                       |                      | 5.4                 | 25.     | 21.            | 23.0           | .1223          | 2.8                | 65.             | .88      | 607.         | 578.     |                   |          | 27.2           | .11      |          |      |  |
| 23               | 0900         | 23.7                         | 6.6              | 26.0                  | .16                  | 5.4                 | 31.     | 23.            | 26.8           | .1446          | 4.0                | 27.             | .74      | 616.         | 619.     |                   |          | 27.1           | .69      |          |      |  |
| 24               | 0900         | 24.6                         | 6.8              | 27.0                  | .07                  | 6.1                 | 24.     | -4.            | 10.4           | .0618          | 6.5                | 116.            | .86      | 488.         | 462.     |                   |          | 21.4           | .12      |          |      |  |
| 25               |              |                              |                  |                       |                      | 6.2                 | -5.     | -14.           | -10.3          | .0204          | 8.9                | 126.            | .86      | 379.         | 363.     |                   |          | .1             | .04      |          |      |  |
| 26               | 1100         | 22.8                         | 6.9              | 25.1                  | .11                  | 6.2                 | -8.     | -21.           | -16.7          | .0142          | 3.9                | 179.            | .83      | 287.         | 251.     |                   |          | -15.4          | 0.00     |          |      |  |
| 27               | 1100         | 21.2                         | 6.6              | 24.4                  | .11                  | 6.2                 | 5.      | -21.           | -5.5           | .0236          | 1.8                | 169.            | .84      | 409.         | 312.     |                   |          | -11.3          | .03      |          |      |  |
| 28               |              |                              |                  |                       |                      | 7.3                 | 30.     | 4.             | 15.7           | .0866          | 1.0                | 19.             | .68      | 546.         | 566.     |                   |          | 8.9            | 1.05     |          |      |  |
| 29               |              |                              |                  |                       |                      | 7.3                 | 32.     | 4.             | 17.5           | .0885          | 5.4                | 40.             | .85      | 483.         | 568.     |                   |          | 22.1           | .07      |          |      |  |
| 30               | 1030         | 30.5                         | 6.7              | 30.2                  | .15                  | 7.5                 | 13.     | -2.            | 5.1            | .0499          | 7.0                | 154.            | .82      | 376.         | 387.     |                   |          | 18.2           | 0.00     |          |      |  |
| 31               | 0900         | 29.9                         | 6.4              | 29.6                  | .15                  | 7.5                 | 20.     | -3.            | 12.1           | .0730          | 2.8                | 64.             | .66      | 543.         | 529.     |                   |          | 13.0           | .07      |          |      |  |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                     |         |                |                |                |                    | 21.             | 8.       | 14.8         | 15.5     | 4.3               | 96.      | .83            | 513.     | TOTAL=   | 6.52 |  |

THE SYMBOLS USED ARE AS FOLLOWS.  
 WE=WATER EQUIVALENT EAS=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-APS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 1/60

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO | QI<br>LY | ANDERSON<br>BAKER |                |           | PX<br>IN | PO<br>IN |     |      |      |        |      |  |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------|----------------|-----------|----------|----------|-----|------|------|--------|------|--|
|                  |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |        |          | QA<br>LY          | AVE<br>TS<br>F | BAK<br>IN |          |          |     |      |      |        |      |  |
| 1                |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |        |          |                   |                |           |          |          |     |      |      |        |      |  |
| 2                | 1300         | 31.8                         | 7.8              | 31.7                  | .20                  | 7.9                           | 22.            | 2.             | 9.2            | .0644              | 6.3             | 66.      | .88    | 523.     | 514.              | 19.0           | .33       |          |          |     |      |      |        |      |  |
| 3                | 0900         | 29.3                         | 8.2              | 31.3                  | .20                  | 7.9                           | 9.             | 1.             | 5.3            | .0498              | 8.5             | 114.     | .82    | 435.     | 451.              | 15.9           | .05       |          |          |     |      |      |        |      |  |
| 4                |              |                              |                  |                       |                      | 7.9                           | 16.            | 2.             | 8.1            | .0527              | 3.3             | 168.     | .77    | 410.     | 383.              | 13.5           | 0.00      |          |          |     |      |      |        |      |  |
| 5                |              |                              |                  |                       |                      | 7.9                           | 17.            | -1.            | 7.0            | .0538              | 2.8             | 120.     | .83    | 435.     | 453.              | 12.7           | 0.00      |          |          |     |      |      |        |      |  |
| 6                |              |                              |                  |                       |                      | 7.9                           | 18.            | -2.            | 6.8            | .0548              | 2.1             | 114.     | .83    | 440.     | 461.              | 12.2           | 0.00      |          |          |     |      |      |        |      |  |
| 7                | 0900         | 27.8                         | 8.3              | 31.0                  | .22                  | 7.9                           | 22.            | 2.             | 11.7           | .0656              | 3.1             | 91.      | .84    | 521.     | 508.              | 12.8           | .01       |          |          |     |      |      |        |      |  |
| 8                | 1000         | 39.1                         | 8.5              | 42.5                  | .12                  | 8.9                           | 29.            | 20.            | 24.5           | .1314              | 5.4             | 33.      | .88    | 621.     | 606.              | 20.0           | 1.31      |          |          |     |      |      |        |      |  |
| 9                | 1030         | 38.1                         | 7.7              | 40.3                  | .11                  | 9.2                           | 20.            | 5.             | 11.2           | .0664              | 8.7             | 122.     | .84    | 501.     | 475.              | 14.4           | .22       |          |          |     |      |      |        |      |  |
| 10               | 1100         | 35.8                         | 8.8              | 39.4                  | .15                  | 9.3                           | 14.            | -3.            | 7.7            | .0578              | 1.4             | 56.      | .88    | 528.     | 516.              | 7.4            | .06       |          |          |     |      |      |        |      |  |
| 11               | 0900         | 35.7                         | 9.1              | 39.7                  | .05                  | 9.4                           | 17.            | -1.            | 12.1           | .0666              | 4.4             | 149.     | .79    | 474.     | 447.              | 14.0           | .13       |          |          |     |      |      |        |      |  |
| 12               | 1400         | 37.6                         | 9.6              | 41.0                  | .04                  | 9.4                           | 11.            | -10.           | 3.0            | .0439              | 3.9             | 144.     | .83    | 434.     | 417.              | 10.2           | .07       |          |          |     |      |      |        |      |  |
| 13               | 0900         | 36.8                         | 9.8              | 40.3                  | .04                  | 9.4                           | 16.            | 10.            | 12.9           | .0703              | 5.6             | 102.     | .85    | 527.     | 508.              | 14.0           | .03       |          |          |     |      |      |        |      |  |
| 14               | 0900         | 36.0                         | 9.4              | 39.0                  | .07                  | 9.5                           | 20.            | 13.            | 17.5           | .0925              | 6.4             | 67.      | .82    | 571.     | 557.              | 17.8           | .08       |          |          |     |      |      |        |      |  |
| 15               | 0900         | 34.8                         | 9.1              | 38.6                  | .10                  | 9.5                           | 21.            | 15.            | 17.4           | .0905              | 7.1             | 82.      | .85    | 562.     | 547.              | 19.8           | .04       |          |          |     |      |      |        |      |  |
| 16               |              |                              |                  |                       |                      | 9.5                           | 25.            | 10.            | 15.4           | .0790              | 5.4             | 126.     | .84    | 500.     | 499.              | 17.9           | 0.00      |          |          |     |      |      |        |      |  |
| 17               | 0900         | 34.5                         | 10.0             | 38.0                  | .10                  | 9.5                           | 25.            | 2.             | 11.7           | .0632              | 1.5             | 206.     | .83    | 400.     | 374.              | 9.3            | 0.00      |          |          |     |      |      |        |      |  |
| 18               | 0900         | 33.6                         | 10.1             | 36.3                  | .12                  | 9.5                           | 25.            | 16.            | 21.5           | .0935              | 2.9             | 52.      | .81    | 614.     | 585.              | 18.2           | 0.00      |          |          |     |      |      |        |      |  |
| 19               |              |                              |                  |                       |                      | 9.6                           | 37.            | 23.            | 29.4           | .1599              | 3.1             | 17.      | .59    | 630.     | 636.              | 25.8           | .19       |          |          |     |      |      |        |      |  |
| 20               | 0930         | 32.5                         | 9.0              | 34.6                  | .19                  | 9.6                           | 36.            | 22.            | 28.4           | .1296              | 6.2             | 90.      | .80    | 599.     | 599.              | 28.9           | 0.00      |          |          |     |      |      |        |      |  |
| 21               | 1000         | 32.0                         | 9.2              | 34.2                  | .17                  | 9.7                           | 33.            | 8.             | 18.2           | .0753              | 2.9             | 210.     | .84    | 443.     | 412.              | 15.5           | 0.00      |          |          |     |      |      |        |      |  |
| 22               | 0915         | 31.8                         | 9.6              | 33.8                  | .21                  | 9.7                           | 41.            | 9.             | 19.8           | .0737              | 2.9             | 206.     | .84    | 457.     | 428.              | 12.5           | 0.00      |          |          |     |      |      |        |      |  |
| 23               | 0900         | 31.8                         | 10.1             | 34.2                  | .23                  | 9.7                           | 44.            | 15.            | 25.3           | .1019              | 1.4             | 212.     | .82    | 493.     | 449.              | 11.1           | 0.00      |          |          |     |      |      |        |      |  |
| 24               | 0900         | 31.3                         | 10.1             | 33.9                  | .23                  | 9.8                           | 38.            | 20.            | 32.1           | .0863              | 3.0             | 188.     | .79    | 555.     | 518.              | 21.4           | 0.00      |          |          |     |      |      |        |      |  |
| 25               |              |                              |                  |                       |                      | 9.7                           | 36.            | 31.            | 35.6           | .1641              | 2.2             | 51.      | .67    | 604.     | 660.              | 31.0           | .38       |          |          |     |      |      |        |      |  |
| 26               |              |                              |                  |                       |                      | 9.7                           | 36.            | 16.            | 27.5           | .1356              | 5.1             | 94.      | .78    | 600.     | 596.              | 26.6           | 0.00      |          |          |     |      |      |        |      |  |
| 27               | 0930         | 28.8                         | 8.9              | 30.0                  | .25                  | 9.7                           | 16.            | -0.            | 10.0           | .0579              | 4.0             | 148.     | .80    | 468.     | 471.              | 8.7            | 0.00      |          |          |     |      |      |        |      |  |
| 28               | 0900         | 28.6                         | 9.5              | 29.9                  | .27                  | 9.7                           | 6.             | -7.            | .2             | .0352              | 6.5             | 199.     | .78    | 365.     | 376.              | -1.1           | 0.00      |          |          |     |      |      |        |      |  |
| 29               | 0900         | 28.8                         | 9.5              | 31.1                  | .25                  | 9.6                           | 18.            | -11.           | .8             | .0298              | 1.4             | 233.     | .79    | 373.     | 336.              | -7.6           | 0.00      |          |          |     |      |      |        |      |  |
| 30               | 0900         | 29.1                         | 9.4              | 31.0                  | .25                  | 9.5                           | 28.            | 4.             | 12.9           | .0654              | 3.9             | 54.      | .80    | 576.     | 546.              | 11.5           | .13       |          |          |     |      |      |        |      |  |
| 31               | 0930         | 31.7                         |                  |                       | .10                  | 10.1                          | 30.            | 17.            | 23.5           | .1271              | 4.1             | 20.      | .55    | 566.     | 605.              | 23.9           | .40       |          |          |     |      |      |        |      |  |
|                  |              |                              |                  |                       |                      |                               |                | 22.            | 27.4           | .1450              | 4.6             | 83.      | .81    | 565.     | 606.              | 28.5           | .38       |          |          |     |      |      |        |      |  |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |        |          | 8.                | 15.9           | 13.6      | 4.2      | 117.     | .81 | 509. | 501. | TOTAL= | 3.81 |  |

THE SYMBOLS USED ARE AS FOLLOWS.

WF=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARPS SNOW RESEARCH STATION. DANVILLE, VERMONT-- 2/60

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>IN | SNOW<br>WE<br>IN | COUPE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QV<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|---------------------|------------------|----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                     |                  |                      |                      | 10.3                          | 27.            | 14.            | 22.5           | .1200              | 1.9             | 61.      | .87          | 595.     | 592.                          | 22.7           | .07      |          |
| 2                |              |                     |                  |                      |                      | 10.4                          | 29.            | 23.            | 24.9           | .1296              | .7              | 86.      | .80          | 611.     | 595.                          | 24.8           | 0.00     |          |
| 3                | 0930         | 31.2                | 10.1             | 33.6                 | .13                  | 11.0                          | 25.            | 21.            | 23.4           | .1238              | 4.2             | 32.      | .84          | 613.     | 603.                          |                | .57      |          |
| 4                | 1505         | 34.8                |                  |                      | .14                  | 11.4                          | 20.            | 3.             | 6.5            | .0519              | 6.7             | 140.     | .84          | 492.     | 479.                          | M              | .22      |          |
| 5                | 1045         | 34.7                | 10.9             | 36.5                 | .20                  | 11.3                          | 2.             | -4.            | -8             | .0337              | 4.5             | 159.     | .86          | 436.     | 436.                          | 1.0            | .10      |          |
| 6                | 0930         | 35.2                | 10.9             | 37.4                 | .17                  | 11.3                          | 16.            | -1.            | 8.2            | .0541              | 2.9             | 231.     | .79          | 443.     | 413.                          | 6.8            | .02      |          |
| 7                | 0930         | 36.0                | 11.1             | 37.9                 | .10                  | 11.3                          | 18.            | -3.            | 9.3            | .0551              | 3.7             | 276.     | .82          | 377.     | 370.                          | 9.3            | 0.00     |          |
| 8                |              |                     |                  |                      |                      | 11.3                          | 27.            | 0.             | 12.5           | .0653              | 1.3             | 279.     | .79          | 431.     | 384.                          | 7.6            | 0.00     |          |
| 9                |              |                     |                  |                      |                      | 11.4                          | 24.            | 14.            | 20.4           | .1071              | 4.9             | 69.      | .90          | 602.     | 581.                          | 17.1           | .48      |          |
| 10               |              |                     |                  |                      |                      | 11.5                          | 21.            | 12.            | 15.9           | .0849              | 12.1            | 159.     | .84          | 538.     | 517.                          | M              | .60      |          |
| 11               | 1100         | 33.8                | 10.0             | 37.7                 | .17                  | 11.5                          | 25.            | 8.             | 16.4           | .0701              | 3.2             | 261.     | .84          | 480.     | 432.                          | M              | 0.00     |          |
| 12               | 1000         | 33.8                | 11.3             | 37.2                 | .18                  | 11.4                          | 32.            | 13.            | 22.1           | .0957              | 1.3             | 233.     | .81          | 542.     | 490.                          | 17.6           | 0.00     |          |
| 13               | 0930         | 34.2                | 11.3             | 37.3                 | .17                  | 11.4                          | 24.            | 8.             | 19.9           | .1005              | 7.1             | 99.      | .84          | 565.     | 570.                          | 19.7           | .11      |          |
| 14               | 0925         | 34.0                | 11.4             | 36.9                 | .20                  | 11.3                          | 7.             | 1.             | 3.8            | .0451              | 6.4             | 241.     | .82          | 454.     | 407.                          | 5.4            | .04      |          |
| 15               |              |                     |                  |                      |                      | 11.3                          | 11.            | 2.             | 7.3            | .0513              | 6.7             | 275.     | .80          | 419.     | 393.                          | 7.9            | 0.00     |          |
| 16               |              |                     |                  |                      |                      | 11.3                          | 16.            | 2.             | 8.3            | .0529              | 4.0             | 207.     | .82          | 436.     | 458.                          | 5.4            | 0.00     |          |
| 17               | 0955         | 33.7                | 11.1             | 37.1                 | .18                  | 11.2                          | 27.            | -1.            | 11.3           | .0560              | 1.7             | 325.     | .79          | 406.     | 363.                          | 2.8            | 0.00     |          |
| 18               | 0915         | 33.7                | 11.0             | 37.7                 | .20                  | 11.2                          | 33.            | 5.             | 20.5           | .0693              | 2.8             | 298.     | .79          | 493.     | 436.                          | 10.7           | 0.00     |          |
| 19               | 0910         | 33.7                | 11.7             | 37.9                 | .20                  | 11.2                          | 36.            | 26.            | 31.7           | .1486              | 4.6             | 125.     | .84          | 630.     | 622.                          | 27.8           | .01      |          |
| 20               | 0915         | 33.7                | 11.7             | 37.8                 | .25                  | 11.2                          | 40.            | 27.            | 33.2           | .1234              | 3.4             | 313.     | .76          | 522.     | 487.                          | 25.4           | 0.00     |          |
| 21               | 1030         | 33.2                | 11.9             | 37.6                 | .24                  | 11.2                          | 42.            | 23.            | 31.2           | .1247              | 2.6             | 321.     | .74          | 481.     | 473.                          | 20.7           | 0.00     |          |
| 22               |              |                     |                  |                      |                      | 11.2                          | 42.            | 20.            | 29.7           | .1254              | 1.8             | 309.     | .76          | 503.     | 483.                          | M              | 0.00     |          |
| 23               |              |                     |                  |                      |                      | 11.2                          | 36.            | 22.            | 29.3           | .1146              | 1.9             | 237.     | .75          | 565.     | 547.                          | M              | 0.00     |          |
| 24               | 0930         | 33.0                | 11.5             | 37.6                 | .29                  | 11.2                          | 28.            | 23.            | 26.7           | .1200              | 2.0             | 75.      | .81          | 617.     | 614.                          | 24.8           | .51      |          |
| 25               |              |                     |                  |                      |                      | 12.4                          | 26.            | 23.            | 24.5           | .1200              | 3.8             | 78.      | .83          | 619.     | 603.                          | M              | 1.11     |          |
| 26               | 1150         | 48.1                | 12.9             | 51.7                 | .12                  | 12.4                          | 29.            | 22.            | 25.5           | .1150              | 6.3             | 191.     | .83          | 593.     | 563.                          | M              | 0.00     |          |
| 27               | 1110         | 47.2                | 11.1             | 50.9                 | .12                  | 12.4                          | 25.            | 18.            | 21.9           | .0887              | 5.3             | 184.     | .82          | 572.     | 550.                          | M              | 0.00     |          |
| 28               | 0930         | 45.6                | 13.3             | 50.1                 | .13                  | 12.5                          | 35.            | 13.            | 24.2           | .0719              | 2.7             | 374.     | .83          | 446.     | 411.                          | M              | 0.00     |          |
| MONTHLY AVERAGE= |              |                     |                  |                      |                      |                               |                |                |                |                    |                 |          |              |          | 495.                          | TOTAL=         | 3.84     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE(AIR)

TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW

M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE

NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

QI=INCOMING SOLAR RADIATION

QV=REFLECTED SOLAR RADIATION

QW=PRECIPITATION

QX=PRECIPITATION

QY=PRECIPITATION

QZ=PRECIPITATION

QAA=PRECIPITATION

QAB=PRECIPITATION

QAC=PRECIPITATION

QAD=PRECIPITATION

QAE=PRECIPITATION

QAF=PRECIPITATION

QAG=PRECIPITATION

QAH=PRECIPITATION

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VERMONT-- 3/69

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COUPSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO | QA<br>LY | BAKER<br>QA<br>LY | ANDERSON<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------|----------------------|----------------|----------|----------|
|                  |              |                              |                  |                       |                      |                               |                |                |                    |                 |          |        |          |                   |                      |                |          |          |
| 1                |              |                              |                  |                       |                      | 12.5                          | 6.             | 19.4           | .0628              | 1.9             | 381.     | .77    | 432.     | 403.              |                      | 12.1           | 0.00     |          |
| 2                |              |                              |                  |                       |                      | 12.5                          | 10.            | 23.2           | .0730              | 2.2             | 220.     | .81    | 558.     | 545.              |                      | 17.7           | 0.00     |          |
| 3                | 1010         | 44.1                         | 13.5             | 47.6                  | .14                  | 12.5                          | 26.            | 27.5           | .0911              | 7.1             | 129.     | .83    | 611.     | 606.              |                      | 24.3           | .11      |          |
| 4                | 0920         | 43.1                         | 13.3             | 46.5                  | .14                  | 12.5                          | 8.             | 19.0           | .0457              | 7.6             | 392.     | .82    | 392.     | 400.              |                      | 12.4           | 0.00     |          |
| 5                | 0930         | 42.3                         | 12.8             | 45.6                  | .15                  | 12.3                          | 0.             | 5.7            | .0310              | 7.1             | 405.     | .81    | 330.     | 338.              |                      | 1.3            | 0.00     |          |
| 6                | 0945         | 41.6                         | 12.3             | 45.0                  | .15                  | 12.3                          | -6.            | 7.1            | .0284              | 4.0             | 413.     | .80    | 348.     | 339.              |                      | 2.2            | 0.00     |          |
| 7                | 0915         | 41.2                         | 12.0             | 44.4                  | .15                  | 12.3                          | -2.            | 9.9            | .0346              | 5.5             | 368.     | .80    | 394.     | 393.              |                      | 4.5            | 0.00     |          |
| 8                |              |                              |                  |                       |                      | 12.3                          | 11.            | 15.5           | .0710              | 6.0             | 257.     | .84    | 526.     | 497.              |                      | 15.1           | .13      |          |
| 9                |              |                              |                  |                       |                      | 12.3                          | 10.            | 18.5           | .0879              | 6.1             | 291.     | .84    | 488.     | 493.              |                      | 18.0           | .04      |          |
| 10               | 0945         | 41.3                         | 12.4             | 45.3                  | .16                  | 12.3                          | 16.            | 20.0           | .0989              | 7.8             | 178.     | .83    | 555.     | 556.              |                      | 20.7           | .13      |          |
| 11               | 0930         | 42.1                         | 13.1             | 44.8                  | .10                  | 12.6                          | 9.             | 14.5           | .0726              | 11.5            | 233.     | .82    | 525.     | 508.              |                      | 16.3           | .05      |          |
| 12               | 1005         | 41.2                         |                  |                       | .13                  | 12.9                          | 10.            | 15.6           | .0767              | 11.6            | 245.     | .82    | 544.     | 509.              |                      | 14.2           | .02      |          |
| 13               | 0920         | 39.7                         | 12.5             | 41.7                  | .15                  | 12.9                          | 20.            | 24.1           | .1132              | 8.2             | 240.     | .82    | 586.     | 553.              |                      | 23.0           | 0.00     |          |
| 14               | 0930         | 39.6                         | 12.4             | 41.0                  | .19                  | 12.9                          | 25.            | 27.7           | .1326              | 5.8             | 146.     | .81    | 608.     | 607.              |                      | 26.0           | 0.00     |          |
| 15               |              |                              |                  |                       |                      | 12.9                          | 19.            | 27.2           | .1196              | 5.0             | 227.     | .81    | 574.     | 576.              |                      | 25.0           | .05      |          |
| 16               |              |                              |                  |                       |                      | 12.9                          | 16.            | 26.2           | .0974              | 4.2             | 326.     | .81    | 531.     | 520.              |                      | 25.2           | 0.00     |          |
| 17               | 0945         | 39.1                         | 12.5             | 42.4                  | .21                  | 12.9                          | 9.             | 21.5           | .1001              | 1.5             | 164.     | .82    | 571.     | 572.              |                      | 19.3           | .17      |          |
| 18               | 1100         | 41.8                         | 13.0             | 42.6                  | .15                  | 12.9                          | 27.            | 31.4           | .1641              | 1.4             | 199.     | .73    | 617.     | 611.              |                      | 28.4           | .13      |          |
| 19               | 0930         | 40.0                         | 13.8             | 42.9                  | .26                  | 12.9                          | 29.            | 32.9           | .1638              | 3.3             | 194.     | .69    | 621.     | 621.              |                      | 30.7           | .30      |          |
| 20               | 0930         | 42.1                         | 13.1             | 42.9                  | .12                  | 13.2                          | 31.            | 32.9           | .1752              | 2.9             | 152.     | .75    | 612.     | 635.              |                      | 32.0           | .04      |          |
| 21               | 1315         | 40.2                         | 13.3             | 41.7                  | .16                  | 13.5                          | 31.            | 32.7           | .1803              | 3.9             | 48.      | .85    | 632.     | 652.              |                      | 32.0           | .14      |          |
| 22               |              |                              |                  |                       |                      | 13.5                          | 24.            | 29.0           | .1368              | 5.9             | 213.     | .76    | 578.     | 597.              |                      | 30.4           | .06      |          |
| 23               |              |                              |                  |                       |                      | 13.5                          | 17.            | 29.4           | .0874              | 4.2             | 474.     | .72    | 467.     | 446.              |                      | 25.9           | 0.00     |          |
| 24               | 0930         | 38.7                         | 13.1             | 40.4                  | .36                  | 13.5                          | 22.            | 36.7           | .0854              | 3.3             | 403.     | .68    | 579.     | 535.              |                      | 27.3           | 0.00     |          |
| 25               | 0930         | 40.1                         | 13.6             | 41.7                  | .12                  | 14.0                          | 31.            | 33.2           | .1782              | 3.8             | 51.      | .82    | 557.     | 655.              |                      | 32.0           | .66      |          |
| 26               | 0930         | 38.5                         | 14.0             | 40.5                  | .32                  | 14.0                          | 28.            | 33.3           | .1700              | 4.5             | 185.     | .72    | 631.     | 630.              |                      | 32.0           | .08      |          |
| 27               | 0930         | 38.8                         |                  |                       | .22                  | 14.0                          | 19.            | 24.0           | .0925              | 4.7             | 395.     | .81    | 540.     | 488.              |                      | 30.0           | .10      |          |
| 28               | 0945         | 38.0                         | 13.5             | 39.0                  | .31                  | 14.0                          | 7.             | 24.1           | .0657              | 3.5             | 523.     | .78    | 431.     | 399.              |                      | 23.9           | 0.00     |          |
| 29               |              |                              |                  |                       |                      | 14.0                          | 23.            | 30.5           | .1363              | 5.9             | 87.      | .72    | 600.     | 637.              |                      | 28.5           | .16      |          |
| 30               |              |                              |                  |                       |                      | 14.1                          | 14.            | 18.2           | .0723              | 5.3             | 347.     | .72    | 497.     | 493.              |                      | 21.1           | .06      |          |
| 31               | 1020         | 38.0                         |                  |                       | .16                  | 14.2                          | 8.             | 14.6           | .0707              | 4.4             | 331.     | .79    | 466.     | 486.              |                      | 20.4           | .08      |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                    |                 |          |        |          |                   |                      |                | 2.51     |          |
| TOTAL=           |              |                              |                  |                       |                      |                               |                |                |                    |                 |          |        |          |                   |                      |                | 2.51     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE (AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 4/60

| DAY              | OBS.<br>TIME | DFPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALBEDO<br>LY | Q4<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                | 0930         | 38.1                         | 13.5             | 39.1                  | .22                  | 14.4                          | 29.            | 0.             | 19.0           | .0725              | 4.5             | 40.4     | .78          | 491.     | 469.                          | 18.4           | .25      |          |
| 2                | 1000         | 42.5                         | 14.7             | 42.7                  | .14                  | 14.8                          | 34.            | 14.            | 27.3           | .1368              | 3.8             | 131.     | .74          | 537.     | 614.                          | 26.6           | .35      |          |
| 3                | 0945         | 41.5                         | 14.7             | 42.4                  | .20                  | 14.9                          | 30.            | 2.             | 16.6           | .0585              | 3.7             | 482.     | .76          | 454.     | 414.                          | 17.8           | 0.00     |          |
| 4                | 1030         | 41.1                         | 14.6             | 39.6                  | .20                  | 14.9                          | 45.            | 17.            | 34.2           | .1142              | 3.8             | 470.     | .69          | 566.     | 506.                          | 27.0           | 0.00     |          |
| 5                | 1405         | 36.3                         | 14.1             | 37.7                  | .35                  | 14.9                          | 42.            | 35.            | 38.2           | .2147              | 2.4             | 117.     | .68          | 617.     | 675.                          | 32.0           | .14      |          |
| 6                |              |                              |                  |                       |                      | 14.7                          | 38.            | 23.            | 32.2           | .1200              | 5.9             | 542.     | .63          | 508.     | 452.                          | 31.9           | 0.00     |          |
| 7                | 0930         | 34.8                         | 14.1             | 35.3                  | .35                  | 13.4                          | 49.            | 21.            | 36.2           | .1189              | 4.7             | 499.     | .63          | 518.     | 503.                          | 32.0           | 0.00     |          |
| 8                | 0910         | 32.3                         | 12.2             | 32.8                  | .37                  | 13.1                          | 39.            | 22.            | 30.3           | .1060              | 4.4             | 564.     | .62          | 460.     | 432.                          | 29.7           | 0.00     |          |
| 9                | 0910         | 31.5                         | 11.4             | 31.6                  | .35                  | 12.5                          | 47.            | 20.            | 37.2           | .1175              | 4.6             | 498.     | .62          | 538.     | 514.                          | 28.5           | .04      |          |
| 10               | 0920         | 27.8                         | 10.0             | 27.2                  | .40                  | 11.3                          | 46.            | 36.            | 41.8           | .2553              | 3.7             | 124.     | .68          | 587.     | 694.                          | 32.0           | .37      |          |
| 11               | 1020         | 25.3                         |                  |                       | .42                  | 10.6                          | 36.            | 28.            | 31.8           | .1045              | 7.4             | 569.     | .63          | 510.     | 444.                          | 32.0           | 0.00     |          |
| 12               |              |                              |                  |                       |                      | 10.2                          | 39.            | 23.            | 30.4           | .0849              | 3.7             | 567.     | .63          | 472.     | 440.                          | 30.0           | 0.00     |          |
| 13               |              |                              |                  |                       |                      | 9.2                           | 50.            | 23.            | 37.1           | .1258              | 3.3             | 573.     | .60          | 521.     | 472.                          | 32.0           | 0.00     |          |
| 14               | 0930         | 21.3                         | 8.4              | 20.4                  | .44                  | 8.1                           | 57.            | 33.            | 44.3           | .1726              | 3.6             | 563.     | .57          | 575.     | 518.                          | 32.0           | 0.00     |          |
| 15               | 0930         | 18.2                         | 7.3              | 17.5                  | .45                  | 7.3                           | 63.            | 34.            | 47.0           | .1928              | 2.6             | 569.     | .56          | 589.     | 531.                          | 31.4           | 0.00     |          |
| 16               | 1000         | 15.0                         | 5.9              | 13.7                  | .40                  | 6.6                           | 51.            | 37.            | 42.5           | .2536              | 1.9             | 95.      | .60          | 732.     | 702.                          | 32.0           | .02      |          |
| 17               | 0930         | 13.0                         | 5.7              | 13.2                  | .45                  | 5.8                           | 48.            | 37.            | 42.8           | .2636              | 1.8             | 132.     | .57          | 702.     | 699.                          | 32.0           | .07      |          |
| 18               | 0930         | 11.0                         | 5.3              | 12.3                  | .42                  | 5.5                           | 44.            | 35.            | 38.6           | .2187              | 3.9             | 78.      | .54          | 623.     | 683.                          | 32.0           | .41      |          |
| 19               |              |                              |                  |                       |                      | 5.4                           | 35.            | 28.            | 31.7           | .1473              | 5.1             | 145.     | .84          | 592.     | 637.                          | 32.0           | .62      |          |
| 20               |              |                              |                  |                       |                      | 5.3                           | 37.            | 23.            | 29.6           | .0918              | 4.6             | 616.     | .74          | 455.     | 424.                          | 32.0           | 0.00     |          |
| 21               | 0930         | 10.3                         | 4.9              | 12.2                  | .45                  | 5.2                           | 47.            | 22.            | 36.5           | .1124              | 3.1             | 471.     | .66          | 544.     | 548.                          | 32.0           | 0.00     |          |
| 22               | 0930         | 9.3                          | 4.5              | 10.7                  | .40                  | 4.9                           | 43.            | 35.            | 37.9           | .1828              | 4.2             | 78.      | .58          | 618.     | 679.                          | 32.0           | 0.00     |          |
| 23               | 0930         | 8.0                          | 4.0              | 9.4                   | .40                  | 4.2                           | 44.            | 33.            | 38.2           | .1803              | 3.8             | 217.     | .55          | 623.     | 658.                          | 32.0           | .20      |          |
| 24               | 0930         | 8.3                          | 3.7              | 8.9                   | .38                  | 4.1                           | 37.            | 33.            | 34.7           | .1834              | 2.7             | 154.     | .64          | 624.     | 652.                          | 32.0           | .20      |          |
| 25               | 0930         | 7.0                          | 3.5              | 8.3                   | .39                  | 3.3                           | 47.            | 29.            | 37.7           | .1433              | 5.0             | 353.     | .54          | 545.     | 614.                          | 31.9           | 0.00     |          |
| 26               |              |                              |                  |                       |                      | 2.4                           | 45.            | 28.            | 36.2           | .1274              | 4.9             | 575.     | .51          | 531.     | 496.                          | 30.7           | 0.00     |          |
| 27               |              |                              |                  |                       |                      | 1.1                           | 62.            | 35.            | 43.6           | .1880              | 3.0             | 417.     | .36          | 587.     | 621.                          | 32.0           | 0.00     |          |
| 28               | 0930         | 0.0                          | 0.0              | 0.0                   | 0.00                 | .4                            | 68.            | 38.            | 50.9           | .2524              | 3.0             | 346.     | .10          | 662.     | 691.                          | 32.0           | .41      |          |
| 29               | 0930         |                              |                  |                       |                      | .9                            | 42.            | 31.            | 34.8           | .1735              | 4.7             | 173.     | .10          | 649.     | 650.                          | 32.0           | 0.00     |          |
| 30               | 0920         |                              |                  |                       |                      | .9                            | 50.            | 34.            | 41.9           | .1173              | 3.6             | 528.     | .10          | 580.     | 556.                          | 32.0           | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |              |          | 566.                          | TOTAL=         | 3.30     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE(AIR) Q1=INCOMING SOLAR RADIATION Q4=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QK=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOP PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 11/69

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | SNOW<br>COURSE<br>WE<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|----------------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                | 1600         |                              | 0.0              | 43.                        | 36.                  | 39.6                          | .2064          | 3.7            | 66.            | 681.               | 681.            | 681.     | 681.         | 681.     | 681.                          |                | 0.00     |          |
| 2                |              |                              | 0.0              | 46.                        | 37.                  | 41.6                          | .2289          | 3.1            | 64.            | 684.               | 684.            | 684.     | 684.         | 684.     | 684.                          |                | .40      |          |
| 3                | 1000         |                              | 0.0              | 56.                        | 44.                  | 50.2                          | .3257          | 1.4            | 127.           | 693.               | 693.            | 693.     | 693.         | 693.     | 693.                          |                | .16      |          |
| 4                | 0900         |                              | 0.0              | 53.                        | 41.                  | 48.1                          | .3087          | 1.8            | 25.            | 684.               | 684.            | 684.     | 684.         | 684.     | 684.                          |                | 1.46     |          |
| 5                | 1000         |                              | 0.0              | 47.                        | 40.                  | 41.8                          | .2416          | 7.3            | 32.            | 569.               | 569.            | 569.     | 569.         | 569.     | 569.                          |                | .82      |          |
| 6                | 1100         |                              | 0.0              | 44.                        | 37.                  | 41.2                          | .2339          | 2.4            | 28.            | 589.               | 589.            | 589.     | 589.         | 589.     | 589.                          |                | .31      |          |
| 7                | 0900         |                              | 0.0              | 52.                        | 42.                  | 48.0                          | .3034          | 2.5            | 41.            | 650.               | 650.            | 650.     | 650.         | 650.     | 650.                          |                | .17      |          |
| 8                | 1500         |                              | 0.0              | 56.                        | 44.                  | 50.5                          | .3092          | 2.6            | 67.            | 707.               | 707.            | 707.     | 707.         | 707.     | 707.                          |                | .23      |          |
| 9                |              |                              | 0.0              | 55.                        | 43.                  | 49.2                          | .2865          | 2.7            | 86.            | 708.               | 708.            | 708.     | 708.         | 708.     | 708.                          |                | .03      |          |
| 10               | 0900         |                              | 0.0              | 46.                        | 38.                  | 42.1                          | .2194          | 1.8            | 119.           | 703.               | 703.            | 703.     | 703.         | 703.     | 703.                          |                | .02      |          |
| 11               |              |                              | 0.0              | 46.                        | 40.                  | 43.0                          | .2342          | 3.1            | 46.            | 584.               | 584.            | 584.     | 584.         | 584.     | 584.                          |                | .24      |          |
| 12               | 0900         |                              | 0.0              | 44.                        | 39.                  | 41.2                          | .2227          | 1.8            | 53.            | 725.               | 725.            | 725.     | 725.         | 725.     | 725.                          |                | .09      |          |
| 13               | 0900         |                              | 0.0              | 42.                        | 26.                  | 35.1                          | .1401          | 4.1            | 220.           | 552.               | 552.            | 552.     | 552.         | 552.     | 552.                          |                | .32      |          |
| 14               | 1000         |                              | .3               | 36.                        | 27.                  | 32.2                          | .1591          | .8             | 27.            | 585.               | 585.            | 585.     | 585.         | 585.     | 585.                          |                | .28      |          |
| 15               |              |                              | .3               | 40.                        | 23.                  | 32.3                          | .1527          | 3.7            | 66.            | 553.               | 553.            | 553.     | 553.         | 553.     | 553.                          |                | .19      |          |
| 16               |              |                              | .2               | 31.                        | 15.                  | 24.0                          | .0964          | 2.7            | 182.           | 457.               | 457.            | 457.     | 457.         | 457.     | 457.                          |                | 0.00     |          |
| 17               | 0900         |                              | .2               | 35.                        | 18.                  | 29.1                          | .1160          | 2.7            | 186.           | 531.               | 531.            | 531.     | 531.         | 531.     | 531.                          |                | 0.00     |          |
| 18               | 0900         |                              | .2               | 43.                        | 30.                  | 36.6                          | .1599          | 3.0            | 123.           | 622.               | 622.            | 622.     | 622.         | 622.     | 622.                          |                | 0.00     |          |
| 19               | 0900         |                              | .4               | 45.                        | 40.                  | 42.3                          | .2216          | 5.5            | 19.            | 656.               | 656.            | 656.     | 656.         | 656.     | 656.                          |                | .34      |          |
| 20               | 0900         | 4.0                          | .4               | 45.                        | 23.                  | 29.4                          | .1337          | 4.1            | 114.           | 527.               | 527.            | 527.     | 527.         | 527.     | 527.                          |                | .86      |          |
| 21               | 0900         |                              | .4               | 22.                        | 9.                   | 15.3                          | .0733          | 5.5            | 168.           | 446.               | 446.            | 446.     | 446.         | 446.     | 446.                          |                | .05      |          |
| 22               |              |                              | .4               | 20.                        | 0.                   | 13.3                          | .0650          | 2.0            | 160.           | 462.               | 462.            | 462.     | 462.         | 462.     | 462.                          |                | 0.00     |          |
| 23               |              |                              | .4               | 34.                        | 20.                  | 27.5                          | .1265          | .8             | 79.            | 620.               | 620.            | 620.     | 620.         | 620.     | 620.                          |                | .14      |          |
| 24               | 0900         |                              | .5               | 33.                        | 13.                  | 23.7                          | .1077          | 3.7            | 38.            | 533.               | 533.            | 533.     | 533.         | 533.     | 533.                          |                | .17      |          |
| 25               | 0900         | 3.8                          | .5               | 27.                        | 5.                   | 17.8                          | .0756          | .9             | 192.           | 377.               | 377.            | 377.     | 377.         | 377.     | 377.                          |                | .02      |          |
| 26               | 0900         | 4.2                          | .5               | 36.                        | 20.                  | 28.4                          | .1296          | 1.5            | 100.           | 572.               | 572.            | 572.     | 572.         | 572.     | 572.                          |                | .06      |          |
| 27               |              |                              | .5               | 26.                        | 3.                   | 16.4                          | .0729          | 1.7            | 175.           | 418.               | 418.            | 418.     | 418.         | 418.     | 418.                          |                | 0.00     |          |
| 28               | 1030         | 3.6                          | .5               | 29.                        | 2.                   | 16.0                          | .0727          | .6             | 200.           | 411.               | 411.            | 411.     | 411.         | 411.     | 411.                          |                | 0.00     |          |
| 29               |              |                              | .5               | 32.                        | 18.                  | 26.8                          | .1285          | 1.0            | 51.            | 581.               | 581.            | 581.     | 581.         | 581.     | 581.                          |                | 0.00     |          |
| 30               |              |                              | .6               | 27.                        | 12.                  | 22.3                          | .1017          | 1.7            | 134.           | 517.               | 517.            | 517.     | 517.         | 517.     | 517.                          |                | .07      |          |
| MONTHLY AVERAGE= |              |                              |                  |                            |                      |                               | 40.            | 26.            | 33.5           | 31.3               | 2.7             | 100.     | 580.         | 605.     | TOTAL=                        | 6.43           |          |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARPS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 12/60

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALBEDO<br>LY | Q4<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|--------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                | 0900         |                              |                  |                       |                      |                                | 28.            | 12.            | 21.0           | .0943              | 2.2             | 120.     | .79          | 531.     | 513.                          |                | .05      |          |
| 2                | 1030         |                              |                  |                       |                      |                                | 14.            | 4.             | 9.0            | .0522              | 2.2             | 196.     | .79          | 375.     | 332.                          |                | 0.00     |          |
| 3                | 0900         |                              |                  |                       |                      |                                | 24.            | 4.             | 16.5           | .0807              | 2.5             | 80.      | .84          | 543.     | 536.                          |                | .07      |          |
| 4                | 0900         |                              |                  |                       |                      |                                | 16.            | 11.            | 13.5           | .0679              | 5.4             | 78.      | .87          | 518.     | 523.                          |                | .03      |          |
| 5                | 0900         |                              |                  |                       |                      |                                | 19.            | 12.            | 15.6           | .0726              | 3.1             | 87.      | .87          | 531.     | 524.                          |                | .06      |          |
| 6                |              |                              |                  |                       |                      |                                | 17.            | 9.             | 12.6           | .0596              | 3.5             | 183.     | .85          | 370.     | 356.                          |                | .02      |          |
| 7                |              |                              |                  |                       |                      |                                | 25.            | 4.             | 16.6           | .0688              | .6              | 162.     | .77          | 465.     | 414.                          |                | 0.00     |          |
| 8                | 0900         |                              |                  |                       |                      |                                | 34.            | 23.            | 29.1           | .1372              | 1.3             | 25.      | .64          | 548.     | 631.                          |                | .24      |          |
| 9                | 0900         |                              |                  |                       |                      |                                | 37.            | 31.            | 34.6           | .1694              | 2.6             | 33.      | .76          | 617.     | 657.                          |                | .34      |          |
| 10               | 0900         |                              |                  |                       |                      |                                | 35.            | 30.            | 31.9           | .1514              | 1.0             | 38.      | .74          | 649.     | 641.                          |                | .11      |          |
| 11               | 0900         |                              |                  |                       |                      |                                | 50.            | 36.            | 39.8           | .1980              | 3.9             | 13.      | .69          | 582.     | 692.                          |                | .77      |          |
| 12               | 1120         |                              |                  |                       |                      |                                | 36.            | 30.            | 34.0           | .1278              | 3.8             | 49.      | .33          | 564.     | 645.                          |                | 0.00     |          |
| 13               |              |                              |                  |                       |                      |                                | 30.            | 13.            | 24.2           | .0936              | 2.0             | 143.     | .83          | 449.     | 478.                          |                | .06      |          |
| 14               |              |                              |                  |                       |                      |                                | 27.            | 12.            | 20.1           | .0860              | .7              | 116.     | .77          | 506.     | 504.                          |                | .06      |          |
| 15               | 0900         |                              |                  |                       |                      |                                | 24.            | 18.            | 20.7           | .0921              | 2.8             | 64.      | .90          | 565.     | 567.                          |                | .04      |          |
| 16               | 0900         |                              |                  |                       |                      |                                | 18.            | 14.            | 15.6           | .0730              | 3.2             | 108.     | .86          | 523.     | 494.                          |                | .02      |          |
| 17               | 0900         |                              |                  |                       |                      |                                | 16.            | 7.             | 12.2           | .0643              | 2.3             | 99.      | .82          | 506.     | 491.                          |                | 0.00     |          |
| 18               | 0900         |                              |                  |                       |                      |                                | 23.            | -1.            | 10.8           | .0610              | .4              | 114.     | .80          | 473.     | 465.                          |                | 0.00     |          |
| 19               | 0900         |                              |                  |                       |                      |                                | 19.            | 17.            | 19.0           | .0887              | 2.9             | 83.      | .84          | 543.     | 541.                          |                | .13      |          |
| 20               |              |                              |                  |                       |                      |                                | 19.            | 9.             | 15.1           | .0705              | 4.1             | 94.      | .85          | 464.     | 510.                          |                | .10      |          |
| 21               |              |                              |                  |                       |                      |                                | 22.            | 6.             | 16.4           | .0762              | 1.6             | 91.      | .86          | 525.     | 520.                          |                | .03      |          |
| 22               | 0900         |                              |                  |                       |                      |                                | 25.            | 15.            | 22.4           | .1069              | 2.6             | 19.      | .79          | 606.     | 599.                          |                | 1.24     |          |
| 23               | 1130         |                              |                  | 1.8                   |                      |                                | 11.            | -9.            | -1.8           | .0297              | 1.8             | 150.     | .82          | 372.     | 356.                          |                | 0.00     |          |
| 24               | 0900         |                              |                  | 1.8                   |                      |                                | 8.             | -6.            | .3             | .0266              | 1.1             | 178.     | .80          | 344.     | 310.                          |                | 0.00     |          |
| 25               |              |                              |                  |                       |                      |                                | 10.            | -12.           | 1.4            | .0303              | .2              | 155.     | .80          | 396.     | 361.                          |                | 0.00     |          |
| 26               |              |                              |                  |                       |                      |                                | 26.            | 8.             | 15.9           | .0769              | 2.4             | 11.      | .82          | 578.     | 568.                          |                | 1.20     |          |
| 27               |              |                              |                  |                       |                      |                                | 31.            | 17.            | 23.1           | .1104              | 9.0             | 26.      | .90          | 564.     | 600.                          |                | .97      |          |
| 28               |              |                              |                  |                       |                      |                                | 18.            | 14.            | 16.7           | .0858              | 6.4             | 62.      | .85          | 486.     | 550.                          |                | .08      |          |
| 29               | 0900         |                              |                  | 4.3                   |                      |                                | 19.            | 2.             | 13.2           | .0698              | 4.1             | 164.     | .88          | 372.     | 402.                          |                | .02      |          |
| 30               | 0900         |                              |                  | 4.3                   |                      |                                | 21.            | 6.             | 14.3           | .0740              | 1.0             | 85.      | .81          | 528.     | 520.                          |                | 0.00     |          |
| 31               | 0900         |                              |                  | 4.1                   |                      |                                | 20.            | 0.             | 8.5            | .0508              | 3.2             | 85.      | .86          | 407.     | 495.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                                |                |                |                |                    |                 |          |              |          | 510.                          | TOTAL=         | 5.66     |          |
|                  |              |                              |                  |                       |                      |                                |                |                |                |                    |                 |          |              |          | 500.                          |                |          |          |

THE SYMBOLS USED ARE AS FOLLOWS.  
WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-APS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 1/76

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COUSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALFREDO<br>LY | OA<br>LY | ANDERSON<br>BAKER<br>OA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|---------------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                  |                      |                      |                               | 9.             | -1.            | 2.6            | .0309              | 4.6             | 167.     | .77           | 330.     | 356.                          |                | 0.00     |          |
| 2                | 0900         |                              | 4.1              | 17.3                 |                      |                               | 9.             | -1.            | 3.1            | .0293              | 2.2             | 152.     | .77           | 347.     | 386.                          |                | 0.00     |          |
| 3                |              |                              |                  |                      |                      |                               | 11.            | -4.            | 3.8            | .0378              | .7              | 151.     | .74           | 400.     | 393.                          |                | 0.00     |          |
| 4                |              |                              |                  |                      |                      |                               | 11.            | -10.           | -1.0           | .0258              | 1.3             | 189.     | .70           | 340.     | 309.                          |                | 0.00     |          |
| 5                | 0900         |                              | 4.0              | 17.4                 |                      |                               | 16.            | -6.            | 7.1            | .0447              | 1.4             | 123.     | .75           | 471.     | 451.                          |                | .02      |          |
| 6                | 0900         |                              | 3.8              | 17.1                 |                      |                               | 16.            | -3.            | 10.9           | .0530              | 3.0             | 140.     | .82           | 430.     | 446.                          |                | 0.00     |          |
| 7                | 0900         |                              | 3.9              | 17.0                 |                      |                               | 13.            | -4.            | 3.9            | .0357              | 1.1             | 147.     | .81           | 421.     | 408.                          |                | 0.00     |          |
| 8                | 0900         |                              | 4.1              | 17.0                 |                      |                               | 11.            | -10.           | 1.0            | .0319              | .8              | 146.     | .80           | 399.     | 399.                          |                | 0.00     |          |
| 9                | 0900         |                              | 3.6              | 16.8                 |                      |                               | 8.             | -2.            | 3.9            | .0397              | 2.1             | 134.     | .82           | 439.     | 429.                          |                | .05      |          |
| 10               |              |                              |                  |                      |                      |                               | 5.             | 1.             | 2.6            | .0354              | 4.2             | 116.     | .86           | 470.     | 446.                          |                | .09      |          |
| 11               |              |                              |                  |                      |                      |                               | 5.             | -13.           | 0.0            | .0312              | 2.7             | 141.     | .81           | 453.     | 408.                          |                | .01      |          |
| 12               | 0900         |                              | 4.3              | 16.8                 | .20                  |                               | 7.             | -14.           | -8             | .0305              | .2              | 113.     | .83           | 514.     | 437.                          |                | .02      |          |
| 13               | 0900         |                              | 3.8              | 17.0                 | .16                  |                               | 8.             | 1.             | 5.0            | .0409              | 4.2             | 135.     | .83           | 460.     | 439.                          |                | .06      |          |
| 14               | 0900         |                              | 3.9              | 16.8                 | .29                  |                               | 0.             | -7.            | -3.0           | .0256              | 4.6             | 162.     | .80           | 386.     | 374.                          |                | .03      |          |
| 15               | 0900         |                              | 4.7              | 16.4                 |                      |                               | 1.             | -12.           | -5.0           | .0214              | 4.0             | 199.     | .75           | 322.     | 314.                          |                | .02      |          |
| 16               | 0900         |                              | 4.8              | 16.3                 | .19                  |                               | 22.            | -11.           | 5.0            | .0359              | .6              | 117.     | .77           | 523.     | 463.                          |                | .01      |          |
| 17               |              |                              |                  |                      |                      |                               | 28.            | 14.            | 22.5           | .0980              | 2.4             | 108.     | .81           | 575.     | 553.                          |                | .03      |          |
| 18               |              |                              |                  |                      |                      |                               | 15.            | -13.           | 7.3            | .0470              | 1.5             | 120.     | .82           | 455.     | 473.                          |                | .06      |          |
| 19               | 0900         |                              |                  |                      | .13                  |                               | 0.             | -17.           | -8.3           | .0185              | .9              | 127.     | .82           | 357.     | 403.                          |                | .01      |          |
| 20               | 0900         |                              | 4.0              | 17.3                 | .16                  |                               | 5.             | -19.           | -5.5           | .0227              | .5              | 210.     | .81           | 373.     | 314.                          |                | 0.00     |          |
| 21               | 0930         |                              | 3.9              | 17.0                 | .16                  |                               | 3.             | -11.           | -6.8           | .0195              | 2.8             | 182.     | .84           | 407.     | 351.                          |                | 0.00     |          |
| 22               | 0930         |                              | 4.4              | 16.9                 | .21                  |                               | -1.            | -16.           | -10.1          | .0158              | 2.4             | 214.     | .80           | 344.     | 298.                          |                | .03      |          |
| 23               | 0900         |                              | 4.2              | 16.6                 | .26                  |                               | 8.             | -14.           | -7             | .0311              | .9              | 93.      | .82           | 474.     | 465.                          |                | .05      |          |
| 24               |              |                              |                  |                      |                      |                               | 8.             | -8.            | .3             | .0294              | 1.7             | 229.     | .78           | 365.     | 323.                          |                | 0.00     |          |
| 25               | 1600         |                              | 4.2              | 16.9                 | .29                  |                               | 14.            | 4.             | 9.8            | .0528              | .6              | 90.      | .81           | 570.     | 514.                          |                | .09      |          |
| 26               | 0900         |                              | 4.7              | 20.2                 | .13                  |                               | 24.            | 14.            | 17.7           | .0828              | 2.3             | 118.     | .84           | 566.     | 532.                          |                | .24      |          |
| 27               | 0900         |                              | 4.9              | 20.5                 | .09                  |                               | 20.            | 6.             | 13.2           | .0639              | 1.1             | 145.     | .85           | 483.     | 490.                          |                | 0.00     |          |
| 28               | 0900         |                              | 4.6              | 19.5                 | .11                  |                               | 27.            | 8.             | 19.9           | .0889              | 2.3             | 114.     | .84           | 556.     | 548.                          |                | .16      |          |
| 29               | 0900         |                              | 4.8              | 20.9                 | .15                  |                               | 43.            | 28.            | 35.5           | .1788              | 4.4             | 49.      | .73           | 648.     | 662.                          |                | .18      |          |
| 30               | 0900         |                              | 5.0              | 19.6                 | .17                  |                               | 29.            | -2.            | 12.2           | .0587              | 4.3             | 215.     | .80           | 417.     | 416.                          |                | .02      |          |
| 31               |              |                              |                  |                      |                      |                               | 20.            | -7.            | 7.2            | .0409              | 1.6             | 231.     | .79           | 396.     | 376.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                      |                      |                               | 13.            | -4.            | 4.9            | .1                 | 2.2             | 148.     | .80           | 442.     | 425.                          | TOTAL=         | 1.18     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) OI=INCOMING SOLAR RADIATION OA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA HI=ANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 2/70

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALFREDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |        |      |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|---------------|----------|-------------------------------|----------------|----------|----------|--------|------|
| 1                |              |                              |                  |                       |                      |                               | 38.            | 10.            | 25.4           | .0987              | 2.2             | 215.     | .79           | 506.     | 492.                          |                | 0.00     |          |        |      |
| 2                | 0900         |                              | 4.7              | 19.1                  | .27                  |                               | 43.            | 23.            | 34.6           | .1411              | 3.6             | 59.      | .83           | 572.     | 655.                          |                | .70      |          |        |      |
| 3                | 0900         |                              | 4.9              | 16.0                  | .33                  |                               | 42.            | 10.            | 33.8           | .1703              | 3.6             | 15.      | .67           | 481.     | 659.                          |                | .62      |          |        |      |
| 4                | 0900         |                              | 5.0              | 16.0                  | .22                  |                               | 6.             | -20.           | -8.3           | .0194              | 6.2             | 198.     | .82           | 295.     | 372.                          |                | .20      |          |        |      |
| 5                | 0900         |                              | 5.0              | 16.0                  | .27                  |                               | 13.            | -20.           | 1.4            | .0318              | 1.3             | 100.     | .79           | 558.     | 480.                          |                | 0.00     |          |        |      |
| 6                | 0900         |                              | 5.2              | 15.8                  | .27                  |                               | 28.            | 11.            | 17.1           | .0814              | .7              | 197.     | .79           | 474.     | 486.                          |                | 0.00     |          |        |      |
| 7                |              |                              |                  |                       |                      |                               | 33.            | 10.            | 19.3           | .0841              | 1.0             | 244.     | .79           | 440.     | 451.                          |                | 0.00     |          |        |      |
| 8                |              |                              |                  |                       |                      |                               | 38.            | 13.            | 23.4           | .0852              | 1.0             | 275.     | .75           | 443.     | 436.                          |                | 0.00     |          |        |      |
| 9                | 0900         |                              | 5.5              | 15.3                  | .26                  |                               | 35.            | 14.            | 26.3           | .0877              | 1.4             | 169.     | .79           | 560.     | 557.                          |                | 0.00     |          |        |      |
| 10               | 0900         |                              | 5.1              | 15.0                  | .27                  |                               | 38.            | 31.            | 34.4           | .1200              | 3.2             | 75.      | .81           | 642.     | 651.                          |                | .02      |          |        |      |
| 11               | 0900         |                              | 5.2              | 14.6                  | .29                  |                               | 42.            | 20.            | 36.3           | .1773              | 3.9             | 59.      | .75           | 543.     | 666.                          |                | .52      |          |        |      |
| 12               | 0900         |                              | 5.8              | 16.7                  | .12                  |                               | 17.            | 3.             | 7.4            | .0469              | 3.9             | 205.     | .86           | 444.     | 448.                          |                | .14      |          |        |      |
| 13               | 0900         |                              | 5.4              | 16.1                  | .14                  |                               | 4.             | -9.            | -6             | .0280              | 2.8             | 268.     | .82           | 367.     | 360.                          |                | 0.00     |          |        |      |
| 14               |              |                              |                  |                       |                      |                               | 8.             | -14.           | -3.2           | .0226              | 1.6             | 257.     | .79           | 358.     | 363.                          |                | 0.00     |          |        |      |
| 15               | 1545         |                              | 5.9              | 18.0                  | .10                  |                               | 22.            | -4.            | 11.8           | .0599              | 1.5             | 69.      | .88           | 563.     | 541.                          |                | .34      |          |        |      |
| 16               | 0900         |                              | 5.9              | 18.7                  | .13                  |                               | 21.            | 2.             | 11.3           | .0568              | 3.8             | 211.     | .85           | 473.     | 468.                          |                | .04      |          |        |      |
| 17               | 0900         |                              | 5.8              | 18.2                  | .14                  |                               | 28.            | 1.             | 16.5           | .0616              | 2.6             | 194.     | .87           | 497.     | 505.                          |                | 0.00     |          |        |      |
| 18               | 0900         |                              | 5.7              | 17.8                  | .14                  |                               | 35.            | 13.            | 26.6           | .1017              | 3.9             | 200.     | .85           | 564.     | 551.                          |                | 0.00     |          |        |      |
| 19               | 0930         |                              | 5.9              | 18.3                  | .12                  |                               | 31.            | 1.             | 17.9           | .0734              | 3.6             | 140.     | .87           | 492.     | 546.                          |                | .14      |          |        |      |
| 20               | 0900         |                              | 5.9              | 17.5                  | .16                  |                               | 16.            | -7.            | 7.7            | .0367              | 3.0             | 319.     | .82           | 400.     | 365.                          |                | 0.00     |          |        |      |
| 21               |              |                              |                  |                       |                      |                               | 18.            | 2.             | 11.3           | .0473              | 2.2             | 275.     | .85           | 492.     | 427.                          |                | .04      |          |        |      |
| 22               |              |                              |                  |                       |                      |                               | 33.            | 14.            | 24.9           | .0999              | 2.7             | 57.      | .90           | 608.     | 608.                          |                | .09      |          |        |      |
| 23               |              |                              |                  |                       |                      |                               | 23.            | -1.            | 3.3            | .0326              | 8.0             | 232.     | .82           | 429.     | 431.                          |                | .07      |          |        |      |
| 24               | 0935         |                              | 5.7              | 18.8                  |                      |                               | 18.            | 0.             | 9.3            | .0501              | 1.5             | 261.     | .84           | 559.     | 438.                          |                | .07      |          |        |      |
| 25               |              |                              |                  |                       |                      |                               | 22.            | -4.            | 13.7           | .0601              | 3.9             | 252.     | .87           | 529.     | 466.                          |                | .20      |          |        |      |
| 26               | 0900         |                              | 5.8              | 19.5                  | .11                  |                               | 3.             | -17.           | -7.5           | .0172              | 1.8             | 370.     | .84           | 347.     | 279.                          |                | .01      |          |        |      |
| 27               | 0900         |                              | 6.0              | 19.3                  | .11                  |                               | 18.            | -5.            | 9.6            | .0418              | 2.0             | 230.     | .87           | 520.     | 466.                          |                | .01      |          |        |      |
| 28               |              |                              |                  |                       |                      |                               | 27.            | 14.            | 20.2           | .0900              | 2.9             | 164.     | .90           | 569.     | 553.                          |                | .10      |          |        |      |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 | 3.       | 15.1          | 10.4     | 2.9                           | 190.           | .83      | 490.     | TOTAL= | 3.31 |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

## DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 3/70

| DAY | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COUPE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F   | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | ANDERSON<br>BAKER |        |          | AVE<br>TS<br>F | PX<br>IN | PO<br>IN    |
|-----|--------------|------------------------------|------------------|----------------------|----------------------|-------------------------------|------------------|----------------|----------------|--------------------|-----------------|-------------------|--------|----------|----------------|----------|-------------|
|     |              |                              |                  |                      |                      |                               |                  |                |                |                    |                 | QA<br>LY          | ALBEDO | QA<br>LY |                |          |             |
| 1   |              |                              |                  |                      |                      |                               |                  |                |                |                    |                 |                   |        |          |                |          |             |
| 2   | 0900         |                              | 6.4              | 20.9                 | .08                  |                               | 23.              | 14.            | 18.6           | .0798              | 1.3             | 132.              | .89    | 549.     | 561.           | .08      |             |
| 3   | 0900         |                              | 6.4              | 20.5                 | .10                  |                               | 33.              | 14.            | 21.6           | .0824              | 1.1             | 153.              | .89    | 524.     | 568.           | 0.00     |             |
| 4   | 0900         |                              | 6.4              | 20.0                 | .17                  |                               | 30.              | 6.             | 18.1           | .0537              | 2.0             | 382.              | .82    | 404.     | 403.           | 0.00     |             |
| 5   | 0900         |                              | 6.4              | 21.0                 | .25                  |                               | 33.              | 3.             | 21.2           | .0648              | 1.8             | 307.              | .80    | 469.     | 483.           | .15      |             |
| 6   | 0900         |                              | 6.4              | 21.0                 | .25                  |                               | 32.              | 25.            | 27.7           | .1319              | 2.8             | 76.               | .89    | 538.     | 621.           | .15      |             |
| 7   | 0900         |                              | 6.6              | 21.2                 | .25                  |                               | 25.              | 20.            | 22.0           | .0947              | 2.5             | 112.              | .88    | 586.     | 585.           | .01      |             |
| 8   |              |                              |                  |                      |                      |                               | 30.              | 17.            | 22.7           | .0974              | 1.2             | 184.              | .84    | 535.     | 565.           | 0.00     |             |
| 9   | 0900         |                              | 6.9              | 20.8                 | .28                  |                               | 27.              | 8.             | 17.1           | .0642              | 6.3             | 349.              | .85    | 478.     | 443.           | .18      |             |
| 10  | 0900         |                              | 7.0              | 21.0                 | .28                  |                               | 20.              | 5.             | 11.5           | .0456              | 6.6             | 392.              | .78    | 401.     | 388.           | 0.00     |             |
| 11  |              |                              |                  |                      |                      |                               | 18.              | 7.             | 13.9           | .0636              | 6.2             | 266.              | .83    | 545.     | 487.           | .07      |             |
| 12  | 0900         |                              | 74.0             | 22.4                 | .07                  |                               | 23.              | 16.            | 19.3           | .0804              | 4.8             | 237.              | .87    | 563.     | 529.           | .06      |             |
| 13  | 0900         |                              | 72.0             | 21.5                 | .11                  |                               | 32.              | 18.            | 24.7           | .0858              | 4.7             | 338.              | .85    | 533.     | 496.           | 0.00     |             |
| 14  |              |                              | 7.0              | 22.1                 |                      |                               | 28.              | 19.            | 24.2           | .1043              | 2.4             | 114.              | .89    | 603.     | 597.           | .30      |             |
| 15  |              |                              |                  |                      |                      |                               | 29.              | 21.            | 24.7           | .1032              | 4.1             | 183.              | .90    | 598.     | 580.           | .12      |             |
| 16  | 0900         |                              | 7.6              | 21.9                 | .25                  |                               | 26.              | 4.             | 19.2           | .0792              | 3.9             | 202.              | .87    | 526.     | 547.           | .05      |             |
| 17  | 0900         |                              | 7.6              | 23.6                 | .15                  |                               | 25.              | 1.             | 15.2           | .0619              | 3.8             | 312.              | .85    | 471.     | 476.           | 0.00     |             |
| 18  | 0900         |                              | 7.3              | 23.7                 | .17                  |                               | 30.              | 13.            | 22.5           | .0760              | 3.9             | 385.              | .86    | 500.     | 465.           | .01      |             |
| 19  | 0900         |                              | 7.4              | 23.5                 | .18                  |                               | 40.              | 19.            | 28.0           | .0809              | 2.9             | 364.              | .85    | 464.     | 507.           | 0.00     |             |
| 20  | 0900         |                              | 7.4              | 22.6                 | .20                  |                               | 44.              | 15.            | 30.5           | .0814              | 2.1             | 456.              | .81    | 482.     | 451.           | 0.00     |             |
| 21  | 0900         |                              | 7.6              | 21.9                 | .25                  |                               | 45.              | 20.            | 34.7           | .0976              | 2.4             | 344.              | .80    | 556.     | 557.           | .18      |             |
| 22  |              |                              |                  |                      |                      |                               | 34.              | 30.            | 31.4           | .1671              | 4.0             | 137.              | .90    | 576.     | 631.           | .41      |             |
| 23  | 0900         |                              | 8.0              | 24.2                 | .16                  |                               | 46.              | 26.            | 35.8           | .1591              | 2.6             | 289.              | .82    | 631.     | 599.           | .07      |             |
| 24  | 0900         |                              | 8.3              | 24.7                 | .19                  |                               | 35.              | 28.            | 31.0           | .1349              | 3.0             | 89.               | .89    | 618.     | 638.           | .20      |             |
| 25  | 0900         |                              | 8.1              | 25.5                 | .10                  |                               | 33.              | 29.            | 31.3           | .1423              | 3.7             | 240.              | .87    | 620.     | 599.           | .18      |             |
| 26  |              |                              |                  |                      |                      |                               |                  | 18.            | 26.8           | .1118              | 3.5             | 308.              | .89    | 541.     | 547.           | .11      |             |
| 27  | 0900         |                              | 8.0              | 24.6                 | .15                  |                               | 37.              | 12.            | 27.6           | .1094              | 2.1             | 133.              | .86    | 587.     | 614.           | .09      |             |
| 28  | 0900         |                              | 8.7              | 23.4                 | .31                  |                               | 36.              | 27.            | 31.6           | .1093              | 5.0             | 344.              | .77    | 506.     | 554.           | .14      |             |
| 29  |              |                              |                  |                      |                      |                               | 22.              | 15.            | 29.4           | .1023              | 3.5             | 213.              | .81    | 535.     | 601.           | .12      |             |
| 30  |              |                              |                  |                      |                      |                               | 30.              | 9.             | 16.5           | .0612              | 2.8             | 210.              | .89    | 484.     | 540.           | 0.00     |             |
| 31  | 0900         |                              | 8.6              | 23.9                 | .25                  |                               |                  | 7.             | 17.8           | .0537              | 2.1             | 497.              | .79    | 406.     | 398.           | 0.00     |             |
|     |              |                              |                  |                      |                      |                               | 33.              | 14.            | 24.1           | .0689              | 2.5             | 321.              | .84    | 486.     | 534.           | 0.00     |             |
|     |              |                              |                  |                      |                      |                               | MONTHLY AVERAGE= | 31.            | 15.            | 23.9               | 15.9            | 3.3               | 260.   | .84      | 526.           | 534.     | TOTAL= 2.68 |

THE SYMBOLS USED ARE AS FOLLOWS.

THE SYMBOLS USED ARE AS FOLLOWS.

|                     |                                                             |                              |                             |                                  |
|---------------------|-------------------------------------------------------------|------------------------------|-----------------------------|----------------------------------|
| WE=WATER EQUIVALENT | E=VAPOR PRESSURE (AIR)                                      | QI=INCOMING SOLAR RADIATION  | QA=ATM. LONGWAVE RADIATION  | PX=PRECIPITATION                 |
| T=AIR TEMPERATURE   | PO=SNOW COVER OUTFLOW                                       | QR=REFLECTED SOLAR RADIATION | TS=SNOW SURFACE TEMPERATURE | U=WIND SPEED                     |
| M=MISSING DATA      | R <sub>L</sub> =RANKS INDICATE THAT NO OBSERVATION WAS MADE | -                            | -                           | - INDICATES DISTRIBUTION UNKNOWN |

NOTE... THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 4/7/70

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN.<br>IN | PILLOW<br>WE AT<br>2400<br>IN | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------------|-------------------------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                | 0900         | 23.8                         | 8.5              | 23.5                  | .32                        | 8.9                           | 37.            | 28.2           | .0892              | 3.1             | 502.     | .75    | 477.     | 447.                          | M              | 0.00     |          |
| 2                | 1000         | 28.3                         | 9.3              | 28.1                  | .12                        | 10.2                          | 35.            | 30.8           | .1387              | 2.4             | 43.      | .84    | 523.     | 643.                          | M              | 1.73     |          |
| 3                | 1030         | 31.2                         | 10.5             | 32.0                  | .13                        | 9.2                           | 34.            | 27.6           | .1128              | 6.1             | 143.     | .90    | 569.     | 613.                          | M              | .50      |          |
| 4                |              |                              |                  |                       |                            | 9.2                           | 33.            | 25.9           | .0802              | 4.6             | 529.     | .81    | 434.     | 425.                          | M              | 0.00     |          |
| 5                |              |                              |                  |                       |                            | 9.3                           | 33.            | 21.3           | .0612              | 4.0             | 522.     | .78    | 392.     | 412.                          | M              | 0.00     |          |
| 6                | 1000         | 28.8                         | 10.4             | 30.0                  | .31                        | 9.5                           | 38.            | 25.4           | .0639              | 2.7             | 547.     | .77    | 452.     | 414.                          | M              | 0.00     |          |
| 7                | 0900         | 29.3                         | 10.2             | 29.1                  | .25                        | 9.7                           | 40.            | 31.7           | .1191              | 2.8             | 352.     | .75    | 553.     | 566.                          | M              | .03      |          |
| 8                | 0900         | 27.7                         | 10.3             | 27.4                  | .36                        | 9.3                           | 50.            | 35.4           | .1256              | 2.3             | 386.     | .69    | 557.     | 569.                          | M              | 0.00     |          |
| 9                | 0900         | 25.8                         | 10.1             | 25.4                  | .35                        | 9.1                           | 57.            | 44.0           | .1629              | 3.1             | 396.     | .65    | 568.     | 610.                          | M              | .03      |          |
| 10               | 0900         | 23.5                         | 9.9              | 23.5                  | .38                        | 9.2                           | 37.            | 31.5           | .1177              | 5.1             | 291.     | .66    | 581.     | 593.                          | M              | 0.00     |          |
| 11               |              |                              |                  |                       |                            | 9.1                           | 29.            | 25.7           | .0969              | 7.3             | 537.     | .67    | 514.     | 439.                          | M              | 0.00     |          |
| 12               |              |                              |                  |                       |                            | 8.8                           | 41.            | 33.8           | .1291              | 4.8             | 434.     | .64    | 550.     | 542.                          | M              | 0.00     |          |
| 13               | 0900         | 22.0                         | 9.7              | 22.0                  | .38                        | 8.4                           | 46.            | 30.2           | .1476              | 2.7             | 304.     | .63    | 620.     | 626.                          | M              | 0.00     |          |
| 14               | 0900         | 20.7                         | 8.3              | 20.5                  | .38                        | 7.8                           | 51.            | 37.4           | .1335              | 1.6             | 602.     | .61    | 484.     | 465.                          | M              | 0.00     |          |
| 15               | 0900         | 19.3                         | 8.6              | 19.6                  | .38                        | 7.2                           | 49.            | 39.9           | .1202              | 2.8             | 607.     | .63    | 489.     | 466.                          | M              | 0.00     |          |
| 16               | 0900         | 17.7                         | 7.5              | 16.7                  | .38                        | 6.5                           | 51.            | 39.3           | .1274              | 2.5             | 590.     | .60    | 509.     | 477.                          | M              | 0.00     |          |
| 17               | 0900         | 15.5                         | 6.1              | 14.3                  | .41                        | 5.5                           | 54.            | 45.7           | .1638              | 4.1             | 507.     | .58    | 583.     | 568.                          | M              | .31      |          |
| 18               |              |                              |                  |                       |                            | 5.0                           | 41.            | 35.4           | .1613              | 4.2             | 148.     | .63    | 550.     | 656.                          | M              | .03      |          |
| 19               |              |                              |                  |                       |                            | 4.4                           | 38.            | 30.4           | .0997              | 5.1             | 612.     | .58    | 452.     | 428.                          | M              | 0.00     |          |
| 20               | 0900         | 10.8                         | 4.4              | 10.1                  | .37                        | 4.3                           | 35.            | 30.6           | .1365              | 2.6             | 140.     | .64    | 515.     | 632.                          | M              | .20      |          |
| 21               | 1130         | 10.5                         | 4.3              | 9.7                   | .37                        | 4.2                           | 38.            | 35.6           | .1871              | 2.3             | 100.     | .69    | 604.     | 664.                          | M              | .23      |          |
| 22               | 0900         | 9.8                          | 4.1              | 9.3                   | .32                        | 3.8                           | 44.            | 37.5           | .1819              | 1.9             | 262.     | .59    | 613.     | 642.                          | M              | .03      |          |
| 23               | 0900         | 8.0                          | 3.6              | 7.4                   | .37                        | 3.3                           | 41.            | 37.4           | .1815              | 4.7             | 163.     | .58    | 694.     | 665.                          | M              | 0.00     |          |
| 24               | 0900         | 5.1                          | 3.0              | 5.1                   | .37                        | 2.4                           | 41.            | 39.0           | .2109              | 3.0             | 75.      | .55    | 673.     | 685.                          | M              | 1.17     |          |
| 25               |              |                              |                  |                       |                            | 1.2                           | 49.            | 40.9           | .1812              | 4.2             | 284.     | .32    | 693.     | 655.                          | M              | 0.00     |          |
| 26               |              |                              |                  |                       |                            | .8                            | 64.            | 46.4           | .1621              | 3.2             | 601.     | .17    | 643.     | 529.                          | M              | 0.00     |          |
| 27               | 0900         | 0.0                          |                  | 0.0                   |                            | .8                            | 72.            | 53.7           | .2144              | 4.0             | 568.     | M      | 687.     | 592.                          | M              | 0.00     |          |
| 28               |              |                              |                  |                       |                            | .8                            | 70.            | 54.7           | .2323              | 3.1             | 580.     | M      | 678.     | 592.                          | M              | 0.00     |          |
| 29               |              |                              |                  |                       |                            | .8                            | 68.            | 53.2           | .1819              | 2.3             | 585.     | M      | 699.     | 580.                          | M              | 0.00     |          |
| 30               |              |                              |                  |                       |                            | .8                            | 71.            | 59.5           | .2354              | 4.6             | 523.     | M      | 733.     | 656.                          | M              | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                            |                               |                |                |                    |                 |          |        |          |                               |                | 562.     | 4.26     |
| TOTAL=           |              |                              |                  |                       |                            |                               |                |                |                    |                 |          |        |          |                               |                | 570.     | 4.26     |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QM=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VFRMONT-- 5/70

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALFREDO<br>LY | Q4<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|---------------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                  |                       |                      |                               | 83.            | 48.            | 65.1           | .3191              | 3.4             | 560.     |               | 747.     | 669.                          |                | 0.00     |          |
| 2                |              |                              |                  |                       |                      |                               | 70.            | 45.            | 58.5           | .3392              | 4.0             | 182.     |               | 732.     | 785.                          |                | .07      |          |
| 3                |              |                              |                  |                       |                      |                               | 48.            | 34.            | 43.0           | .1877              | 3.7             | 251.     |               | 581.     | 679.                          |                | .29      |          |
| 4                |              |                              |                  |                       |                      |                               | 63.            | 34.            | 48.5           | .1840              | 2.9             | 625.     |               | 596.     | 540.                          |                | 0.00     |          |
| 5                |              |                              |                  |                       |                      |                               | 65.            | 43.            | 52.4           | .2040              | 3.2             | 584.     |               | 566.     | 588.                          |                | .17      |          |
| 6                |              |                              |                  |                       |                      |                               | 42.            | 30.            | 34.5           | .1588              | 5.1             | 132.     |               | 589.     | 655.                          |                | .29      |          |
| 7                |              |                              |                  |                       |                      |                               | 41.            | 29.            | 35.7           | .1154              | 5.5             | 450.     |               | 592.     | 572.                          |                | 0.00     |          |
| 8                |              |                              |                  |                       |                      |                               | 56.            | 36.            | 48.0           | .1572              | 3.7             | 487.     |               | 600.     | 620.                          |                | .01      |          |
| 9                |              |                              |                  |                       |                      |                               | 60.            | 43.            | 51.2           | .2350              | 3.3             | 495.     |               | 617.     | 637.                          |                | .17      |          |
| 10               |              |                              |                  |                       |                      |                               | 78.            | 45.            | 63.8           | .3392              | 3.7             | 534.     |               | 652.     | 690.                          |                | .26      |          |
| 11               |              |                              |                  |                       |                      |                               | 69.            | 53.            | 60.5           | .3706              | 2.9             | 345.     |               | 667.     | 756.                          |                | .26      |          |
| 12               |              |                              |                  |                       |                      |                               | 60.            | 45.            | 51.7           | .2675              | 2.2             | 491.     |               | 687.     | 645.                          |                | .01      |          |
| 13               |              |                              |                  |                       |                      |                               | 63.            | 46.            | 53.4           | .3211              | 2.8             | 184.     |               | 738.     | 755.                          |                | 0.00     |          |
| 14               |              |                              |                  |                       |                      |                               | 62.            | 44.            | 51.8           | .1871              | 3.7             | 636.     |               | 653.     | 565.                          |                | 0.00     |          |
| 15               |              |                              |                  |                       |                      |                               | 61.            | 37.            | 52.6           | .1974              | 2.5             | 493.     |               | 651.     | 649.                          |                | 0.00     |          |
| 16               |              |                              |                  |                       |                      |                               | 56.            | 47.            | 50.2           | .2140              | 5.0             | 340.     |               | 673.     | 698.                          |                | .01      |          |
| 17               |              |                              |                  |                       |                      |                               | 52.            | 46.            | 49.4           | .2986              | 2.9             | 95.      |               | 564.     | 744.                          |                | 1.02     |          |
| 18               |              |                              |                  |                       |                      |                               | 53.            | 46.            | 50.0           | .2440              | 4.3             | 198.     |               | 712.     | 733.                          |                | 0.00     |          |
| 19               |              |                              |                  |                       |                      |                               | 67.            | 50.            | 56.7           | .2780              | 2.8             | 478.     |               | 707.     | 684.                          |                | 0.00     |          |
| 20               |              |                              |                  |                       |                      |                               | 64.            | 47.            | 56.0           | .2649              | 3.8             | 645.     |               | 665.     | 593.                          |                | 0.00     |          |
| 21               |              |                              |                  |                       |                      |                               | 69.            | 40.            | 56.0           | .2544              | 2.3             | 638.     |               | 618.     | 597.                          |                | 0.00     |          |
| 22               |              |                              |                  |                       |                      |                               | 71.            | 47.            | 57.4           | .3649              | 2.8             | 236.     |               | 709.     | 770.                          |                | .48      |          |
| 23               |              |                              |                  |                       |                      |                               | 60.            | 41.            | 50.6           | .2304              | 3.2             | 629.     |               | 623.     | 576.                          |                | 0.00     |          |
| 24               |              |                              |                  |                       |                      |                               | 55.            | 38.            | 47.7           | .1372              | 2.6             | 590.     |               | 620.     | 579.                          |                | 0.00     |          |
| 25               |              |                              |                  |                       |                      |                               | 46.            | 39.            | 43.0           | .2105              | 3.3             | 128.     |               | 550.     | 704.                          |                | .06      |          |
| 26               |              |                              |                  |                       |                      |                               | 60.            | 45.            | 52.3           | .3478              | 2.7             | 166.     |               | 636.     | 753.                          |                | .40      |          |
| 27               |              |                              |                  |                       |                      |                               | 55.            | 44.            | 48.7           | .2245              | 4.5             | 607.     |               | 626.     | 581.                          |                | 0.00     |          |
| 28               |              |                              |                  |                       |                      |                               | 54.            | 37.            | 45.5           | .1865              | 3.0             | 662.     |               | 568.     | 534.                          |                | 0.00     |          |
| 29               |              |                              |                  |                       |                      |                               | 65.            | 34.            | 51.5           | .1680              | 2.0             | 733.     |               | 573.     | 523.                          |                | 0.00     |          |
| 30               |              |                              |                  |                       |                      |                               | 71.            | 37.            | 55.8           | .2428              | 2.9             | 688.     |               | 621.     | 574.                          |                | 0.00     |          |
| 31               |              |                              |                  |                       |                      |                               | 80.            | 46.            | 64.4           | .3308              | 2.4             | 654.     |               | 729.     | 644.                          |                | .10      |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               | 61.            | 42.            | 51.8           | 39.7               | 3.3             | 450.     |               | 641.     | 648.                          | TOTAL=         | 3.60     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIP) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OH=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION. DANVILLE,VFPMONT-- 6/70

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>SUR.<br>DEN. | PILOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALREDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>TN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------|------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                      |                              | 78.            | 60.            | 68.0           | .4998              | 2.1             | 231.     |              | 664.     | 839.                          |                | 0.00     |          |
| 2                |              |                              |                      |                              | 82.            | 62.            | 73.0           | .4858              | 3.2             | 522.     |              | 778.     | 770.                          |                | .04      |          |
| 3                |              |                              |                      |                              | 71.            | 50.            | 61.1           | .4052              | 3.3             | 198.     |              | 773.     | 801.                          |                | .02      |          |
| 4                |              |                              |                      |                              | 64.            | 46.            | 55.0           | .2753              | 2.0             | 545.     |              | 704.     | 652.                          |                | 0.00     |          |
| 5                |              |                              |                      |                              | 66.            | 51.            | 57.7           | .3293              | 2.5             | 399.     |              | 678.     | 729.                          |                | 1.09     |          |
| 6                |              |                              |                      |                              | 58.            | 50.            | 53.5           | .3397              | 1.6             | 212.     |              | 716.     | 753.                          |                | .06      |          |
| 7                |              |                              |                      |                              | 63.            | 48.            | 54.6           | .3181              | 1.8             | 349.     |              | 721.     | 727.                          |                | 0.00     |          |
| 8                |              |                              |                      |                              | 75.            | 48.            | 62.0           | .3643              | 2.1             | 668.     |              | 686.     | 629.                          |                | 0.00     |          |
| 9                |              |                              |                      |                              | 79.            | 55.            | 65.8           | .4152              | 2.5             | 683.     |              | 705.     | 643.                          |                | 0.00     |          |
| 10               |              |                              |                      |                              | 79.            | 54.            | 67.0           | .3960              | 2.7             | 652.     |              | 704.     | 667.                          |                | 0.00     |          |
| 11               |              |                              |                      |                              | 79.            | 56.            | 66.4           | .4637              | 3.3             | 479.     |              | 731.     | 752.                          |                | .15      |          |
| 12               |              |                              |                      |                              | 70.            | 46.            | 58.7           | .2483              | 2.9             | 663.     |              | 647.     | 610.                          |                | 0.00     |          |
| 13               |              |                              |                      |                              | 59.            | 39.            | 50.7           | .1961              | 3.1             | 712.     |              | 580.     | 539.                          |                | 0.00     |          |
| 14               |              |                              |                      |                              | 69.            | 37.            | 54.2           | .2271              | 2.4             | 727.     |              | 602.     | 548.                          |                | 0.00     |          |
| 15               |              |                              |                      |                              | 73.            | 43.            | 60.1           | .3191              | 2.5             | 651.     |              | 671.     | 629.                          |                | 0.00     |          |
| 16               |              |                              |                      |                              | 70.            | 47.            | 60.6           | .3764              | 2.2             | 545.     |              | 705.     | 688.                          |                | 0.00     |          |
| 17               |              |                              |                      |                              | 74.            | 52.            | 63.2           | .4513              | 2.4             | 309.     |              | 813.     | 792.                          |                | 0.00     |          |
| 18               |              |                              |                      |                              | 73.            | 60.            | 66.3           | .5344              | 2.9             | 310.     |              | 752.     | 811.                          |                | .12      |          |
| 19               |              |                              |                      |                              | 74.            | 52.            | 64.6           | .3899              | 3.4             | 507.     |              | 721.     | 729.                          |                | 0.00     |          |
| 20               |              |                              |                      |                              | 51.            | 46.            | 48.4           | .2389              | 3.3             | 279.     |              | 704.     | 709.                          |                | 0.00     |          |
| 21               |              |                              |                      |                              | 65.            | 45.            | 54.5           | .2806              | 3.2             | 590.     |              | 667.     | 631.                          |                | .08      |          |
| 22               |              |                              |                      |                              | 67.            | 50.            | 58.2           | .3434              | 3.0             | 434.     |              | 702.     | 721.                          |                | 0.00     |          |
| 23               |              |                              |                      |                              | 71.            | 52.            | 61.1           | .3156              | 3.5             | 661.     |              | 659.     | 629.                          |                | 0.00     |          |
| 24               |              |                              |                      |                              | 76.            | 51.            | 65.4           | .3610              | 3.8             | 594.     |              | 698.     | 690.                          |                | 0.00     |          |
| 25               |              |                              |                      |                              | 62.            | 40.            | 53.4           | .2925              | 3.6             | 516.     |              | 638.     | 660.                          |                | .07      |          |
| 26               |              |                              |                      |                              | 65.            | 39.            | 51.5           | .2806              | 2.5             | 484.     |              | 606.     | 663.                          |                | .19      |          |
| 27               |              |                              |                      |                              | 52.            | 44.            | 49.4           | .3053              | 2.5             | 108.     |              | 559.     | 743.                          |                | 1.04     |          |
| 28               |              |                              |                      |                              | 63.            | 42.            | 52.0           | .2524              | 3.8             | 708.     |              | 601.     | 551.                          |                | 0.00     |          |
| 29               |              |                              |                      |                              | 69.            | 41.            | 57.1           | .3043              | 3.0             | 445.     |              | 613.     | 709.                          |                | .41      |          |
| 30               |              |                              |                      |                              | 61.            | 56.            | 58.1           | .4095              | 2.6             | 123.     |              | 669.     | 794.                          |                | .92      |          |
| MONTHLY AVERAGE= |              |                              |                      |                              |                |                |                |                    |                 | 69.      | 49.          | 59.1     | 48.9                          | 2.8            | 477.     | 682.     |
|                  |              |                              |                      |                              |                |                |                |                    |                 | TOTAL=   |              |          |                               |                |          |          |
|                  |              |                              |                      |                              |                |                |                |                    |                 | 4.19     |              |          |                               |                |          |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOP PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 7/70

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                  |                       |                      |                               | 71.            | 55.            | 62.1           | .3929              | 3.2             | 590.     |              | 744.     | 672.                          |                | 0.00     |          |
| 2                |              |                              |                  |                       |                      |                               | 60.            | 56.            | 58.2           | .3978              | 1.3             | 71.      |              | 694.     | 799.                          |                | .11      |          |
| 3                |              |                              |                  |                       |                      |                               | 71.            | 57.            | 63.8           | .4772              | 2.2             | 463.     |              | 809.     | 742.                          |                | .03      |          |
| 4                |              |                              |                  |                       |                      |                               | 70.            | 56.            | 65.4           | .5367              | 2.7             | 251.     |              | 737.     | 819.                          |                | .34      |          |
| 5                |              |                              |                  |                       |                      |                               | 66.            | 54.            | 60.5           | .3893              | 3.9             | 428.     |              | 714.     | 734.                          |                | 0.00     |          |
| 6                |              |                              |                  |                       |                      |                               | 73.            | 54.            | 62.6           | .3527              | 3.2             | 652.     |              | 701.     | 637.                          |                | 0.00     |          |
| 7                |              |                              |                  |                       |                      |                               | 75.            | 53.            | 64.4           | .3582              | 3.1             | 628.     |              | 683.     | 660.                          |                | 0.00     |          |
| 8                |              |                              |                  |                       |                      |                               | 78.            | 52.            | 66.1           | .4070              | 2.9             | 593.     |              | 726.     | 691.                          |                | 0.00     |          |
| 9                |              |                              |                  |                       |                      |                               | 80.            | 56.            | 68.1           | .4315              | 2.4             | 509.     |              | 753.     | 746.                          |                | 0.00     |          |
| 10               |              |                              |                  |                       |                      |                               | 77.            | 57.            | 68.3           | .4743              | 2.0             | 488.     |              | 756.     | 756.                          |                | .16      |          |
| 11               |              |                              |                  |                       |                      |                               | 75.            | 59.            | 66.1           | .5226              | 3.5             | 304.     |              | 798.     | 809.                          |                | 0.00     |          |
| 12               |              |                              |                  |                       |                      |                               | 70.            | 51.            | 60.0           | .3329              | 4.0             | 555.     |              | 651.     | 673.                          |                | .01      |          |
| 13               |              |                              |                  |                       |                      |                               | 69.            | 49.            | 58.5           | .3024              | 3.3             | 665.     |              | 645.     | 602.                          |                | 0.00     |          |
| 14               |              |                              |                  |                       |                      |                               | 73.            | 47.            | 60.7           | .3516              | 2.7             | 451.     |              | 740.     | 724.                          |                | 0.00     |          |
| 15               |              |                              |                  |                       |                      |                               | 68.            | 58.            | 63.7           | .4764              | 3.8             | 213.     |              | 787.     | 815.                          |                | 0.00     |          |
| 16               |              |                              |                  |                       |                      |                               | 72.            | 61.            | 66.3           | .5643              | 2.5             | 175.     |              | 690.     | 838.                          |                | .16      |          |
| 17               |              |                              |                  |                       |                      |                               | 75.            | 55.            | 64.2           | .4228              | 3.2             | 668.     |              | 736.     | 633.                          |                | .02      |          |
| 18               |              |                              |                  |                       |                      |                               | 74.            | 53.            | 63.3           | .4293              | 3.2             | 390.     |              | 674.     | 763.                          |                | .63      |          |
| 19               |              |                              |                  |                       |                      |                               | 69.            | 44.            | 57.3           | .3226              | 1.7             | 660.     |              | 706.     | 596.                          |                | 0.00     |          |
| 20               |              |                              |                  |                       |                      |                               | 75.            | 60.            | 67.1           | .4873              | 4.5             | 464.     |              | 841.     | 756.                          |                | 0.00     |          |
| 21               |              |                              |                  |                       |                      |                               | 67.            | 51.            | 61.4           | .3769              | 4.3             | 357.     |              | 708.     | 761.                          |                | 0.00     |          |
| 22               |              |                              |                  |                       |                      |                               | 70.            | 44.            | 59.9           | .3181              | 3.6             | 577.     |              | 673.     | 655.                          |                | 0.00     |          |
| 23               |              |                              |                  |                       |                      |                               | 80.            | 55.            | 67.9           | .4171              | 2.4             | 576.     |              | 782.     | 702.                          |                | 0.00     |          |
| 24               |              |                              |                  |                       |                      |                               | 81.            | 54.            | 68.2           | .4603              | 1.5             | 521.     |              | 806.     | 734.                          |                | 0.00     |          |
| 25               |              |                              |                  |                       |                      |                               | 82.            | 58.            | 71.5           | .5273              | 2.2             | 498.     |              | 853.     | 765.                          |                | 0.00     |          |
| 26               |              |                              |                  |                       |                      |                               | 81.            | 62.            | 72.5           | .5180              | 3.2             | 589.     |              | 844.     | 722.                          |                | 0.00     |          |
| 27               |              |                              |                  |                       |                      |                               | 83.            | 60.            | 71.6           | .5050              | 2.1             | 580.     |              | 844.     | 720.                          |                | 0.00     |          |
| 28               |              |                              |                  |                       |                      |                               | 82.            | 61.            | 71.3           | .5463              | 2.9             | 413.     |              | 838.     | 801.                          |                | 0.00     |          |
| 29               |              |                              |                  |                       |                      |                               | 82.            | 62.            | 70.2           | .5777              | 1.5             | 408.     |              | 841.     | 796.                          |                | .02      |          |
| 30               |              |                              |                  |                       |                      |                               | 84.            | 62.            | 73.2           | .5888              | 2.1             | 536.     |              | 894.     | 754.                          |                | 0.00     |          |
| 31               |              |                              |                  |                       |                      |                               | 76.            | 68.            | 71.9           | .5760              | 3.2             | 281.     |              | 890.     | 849.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               | 74.            | 56.            | 65.4           | 55.8               | 2.8             | 469.     |              | 760.     | 733.                          | TOTAL=         | 1.48     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VFRMONT-- 8/7/

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COUPE<br>WE<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN    |
|------------------|--------------|------------------------------|---------------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|-------------|
| 1                |              |                              |                           |                      |                               | 78.            | 61.            | 69.5           | .5854              | 2.5             | 223.     |              | 792.     | 848.                          |                | .68      |             |
| 2                |              |                              |                           |                      |                               | 78.            | 60.            | 68.2           | .4983              | 2.7             | 488.     |              | 755.     | 742.                          |                | .25      |             |
| 3                |              |                              |                           |                      |                               | 71.            | 54.            | 63.3           | .4039              | 2.8             | 384.     |              | 729.     | 757.                          |                | .14      |             |
| 4                |              |                              |                           |                      |                               | 65.            | 47.            | 57.6           | .3339              | 3.5             | 455.     |              | 702.     | 692.                          |                | .02      |             |
| 5                |              |                              |                           |                      |                               | 68.            | 46.            | 57.7           | .33408             | 2.1             | 465.     |              | 730.     | 687.                          |                | 0.00     |             |
| 6                |              |                              |                           |                      |                               | 72.            | 52.            | 62.4           | .3834              | 1.6             | 423.     |              | 781.     | 734.                          |                | 0.00     |             |
| 7                |              |                              |                           |                      |                               | 75.            | 51.            | 63.4           | .3787              | 1.7             | 559.     |              | 751.     | 668.                          |                | 0.00     |             |
| 8                |              |                              |                           |                      |                               | 78.            | 53.            | 64.1           | .3923              | 1.6             | 504.     |              | 769.     | 703.                          |                | 0.00     |             |
| 9                |              |                              |                           |                      |                               | 80.            | 53.            | 66.2           | .4127              | 1.2             | 572.     |              | 793.     | 674.                          |                | 0.00     |             |
| 10               |              |                              |                           |                      |                               | 82.            | 56.            | 66.7           | .4432              | 1.2             | 512.     |              | 787.     | 712.                          |                | .03      |             |
| 11               |              |                              |                           |                      |                               | 75.            | 55.            | 65.2           | .4486              | 1.1             | 393.     |              | 779.     | 761.                          |                | 0.00     |             |
| 12               |              |                              |                           |                      |                               | 74.            | 60.            | 67.4           | .4439              | 4.1             | 500.     |              | 796.     | 721.                          |                | 0.00     |             |
| 13               |              |                              |                           |                      |                               | 80.            | 59.            | 69.2           | .4541              | 2.7             | 493.     |              | 815.     | 734.                          |                | 0.00     |             |
| 14               |              |                              |                           |                      |                               | 82.            | 58.            | 69.3           | .4729              | 1.6             | 481.     |              | 822.     | 741.                          |                | 0.00     |             |
| 15               |              |                              |                           |                      |                               | 83.            | 62.            | 71.5           | .4772              | 2.3             | 523.     |              | 821.     | 728.                          |                | 0.00     |             |
| 16               |              |                              |                           |                      |                               | 83.            | 60.            | 71.2           | .4701              | 2.2             | 440.     |              | 821.     | 771.                          |                | 0.00     |             |
| 17               |              |                              |                           |                      |                               | 76.            | 57.            | 67.2           | .3810              | 3.7             | 492.     |              | 736.     | 716.                          |                | 0.00     |             |
| 18               |              |                              |                           |                      |                               | 68.            | 49.            | 57.6           | .2847              | 3.9             | 593.     |              | 681.     | 595.                          |                | 0.00     |             |
| 19               |              |                              |                           |                      |                               | 75.            | 46.            | 61.3           | .3221              | 2.3             | 562.     |              | 734.     | 635.                          |                | 0.00     |             |
| 20               |              |                              |                           |                      |                               | 70.            | 60.            | 65.0           | .4459              | 3.6             | 196.     |              | 823.     | 821.                          |                | .46      |             |
| 21               |              |                              |                           |                      |                               | 66.            | 50.            | 59.5           | .3277              | 3.5             | 451.     |              | 701.     | 689.                          |                | .02      |             |
| 22               |              |                              |                           |                      |                               | 66.            | 50.            | 57.2           | .2958              | 2.2             | 444.     |              | 725.     | 677.                          |                | 0.00     |             |
| 23               |              |                              |                           |                      |                               | 59.            | 53.            | 56.5           | .3521              | 1.8             | 33.      |              | 656.     | 790.                          |                | 1.02     |             |
| 24               |              |                              |                           |                      |                               | 65.            | 47.            | 56.5           | .2897              | 3.6             | 512.     |              | 731.     | 631.                          |                | .01      |             |
| 25               |              |                              |                           |                      |                               | 69.            | 53.            | 60.5           | .3467              | 2.7             | 383.     |              | 724.     | 724.                          |                | .08      |             |
| 26               |              |                              |                           |                      |                               | 77.            | 54.            | 66.6           | .3852              | 3.3             | 466.     |              | 725.     | 715.                          |                | .20      |             |
| 27               |              |                              |                           |                      |                               | 66.            | 48.            | 58.1           | .3043              | 2.9             | 528.     |              | 715.     | 624.                          |                | 0.00     |             |
| 28               |              |                              |                           |                      |                               | 68.            | 50.            | 59.2           | .3451              | 1.7             | 251.     |              | 719.     | 767.                          |                | 1.14     |             |
| 29               |              |                              |                           |                      |                               | 66.            | 48.            | 58.8           | .3092              | 3.6             | 388.     |              | 752.     | 707.                          |                | 0.00     |             |
| 30               |              |                              |                           |                      |                               | 64.            | 44.            | 55.2           | .2740              | 2.8             | 342.     |              | 663.     | 706.                          |                | .07      |             |
| 31               |              |                              |                           |                      |                               | 64.            | 46.            | 55.1           | .2532              | 5.3             | 406.     |              | 691.     | 673.                          |                | .04      |             |
| MONTHLY AVERAGE= |              |                              |                           |                      |                               |                |                |                |                    | 72.             | 53.      | 62.8         | 51.5     | 2.6                           | 434.           | 749.     | TOTAL= 4.16 |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OX=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOE PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE-VERMONT-- 9/70

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COURSE<br>WE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | OI<br>LY | ALBEDO<br>LY | QA<br>LY | BAKER<br>QA<br>LY | ANDERSON<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|-------------------------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------|----------------------|----------------|----------|----------|
| 1                |              |                              |                                     |                      |                               | 54.            | 45.            | 48.6           | .1855              | 4.7             | 460.     |              | 639.     | 601.              |                      |                | 0.00     |          |
| 2                |              |                              |                                     |                      |                               | 60.            | 40.            | 49.6           | .1896              | 3.6             | 543.     |              | 625.     | 625.              |                      |                | .08      |          |
| 3                |              |                              |                                     |                      |                               | 59.            | 39.            | 50.3           | .2467              | 2.3             | 216.     |              | 581.     | 721.              |                      |                | .41      |          |
| 4                |              |                              |                                     |                      |                               | 70.            | 55.            | 63.8           | .4280              | 2.7             | 127.     |              | 693.     | 824.              |                      |                | .97      |          |
| 5                |              |                              |                                     |                      |                               | 67.            | 52.            | 61.1           | .3510              | 3.6             | 233.     |              | 678.     | 780.              |                      |                | .25      |          |
| 6                |              |                              |                                     |                      |                               | 52.            | 50.            | 51.3           | .2615              | 3.3             | 98.      |              | 587.     | 752.              |                      |                | .15      |          |
| 7                |              |                              |                                     |                      |                               | 56.            | 50.            | 52.6           | .2624              | 2.1             | 207.     |              | 782.     | 735.              |                      |                | 0.00     |          |
| 8                |              |                              |                                     |                      |                               | 59.            | 48.            | 52.4           | .2653              | 1.5             | 228.     |              | 749.     | 727.              |                      |                | 0.00     |          |
| 9                |              |                              |                                     |                      |                               | 56.            | 52.            | 53.6           | .3371              | 2.5             | 79.      |              | 803.     | 768.              |                      |                | 0.00     |          |
| 10               |              |                              |                                     |                      |                               | 65.            | 55.            | 60.3           | .4743              | 2.9             | 74.      |              | 818.     | 810.              |                      |                | .19      |          |
| 11               |              |                              |                                     |                      |                               | 62.            | 42.            | 52.2           | .2641              | 3.8             | 500.     |              | 659.     | 571.              |                      |                | 0.00     |          |
| 12               |              |                              |                                     |                      |                               | 66.            | 40.            | 53.7           | .2793              | 2.5             | 466.     |              | 666.     | 602.              |                      |                | 0.00     |          |
| 13               |              |                              |                                     |                      |                               | 69.            | 43.            | 53.0           | .3058              | 2.4             | 275.     |              | 715.     | 709.              |                      |                | 0.00     |          |
| 14               |              |                              |                                     |                      |                               | 58.            | 41.            | 48.2           | .2293              | 1.4             | 348.     |              | 734.     | 643.              |                      |                | 0.00     |          |
| 15               |              |                              |                                     |                      |                               | 46.            | 44.            | 45.1           | .2615              | 1.3             | 55.      |              | 583.     | 720.              |                      |                | .24      |          |
| 16               |              |                              |                                     |                      |                               | 64.            | 45.            | 52.5           | .3024              | 4.1             | 214.     |              | 681.     | 728.              |                      |                | .18      |          |
| 17               |              |                              |                                     |                      |                               | 55.            | 39.            | 47.8           | .2586              | 1.3             | 244.     |              | 706.     | 688.              |                      |                | 0.00     |          |
| 18               |              |                              |                                     |                      |                               | 52.            | 49.            | 51.0           | .3339              | .8              | 50.      |              | 696.     | 755.              |                      |                | .04      |          |
| 19               |              |                              |                                     |                      |                               | 62.            | 46.            | 53.2           | .2986              | 3.5             | 462.     |              | 653.     | 582.              |                      |                | 0.00     |          |
| 20               |              |                              |                                     |                      |                               | 68.            | 47.            | 54.8           | .3058              | 2.1             | 411.     |              | 687.     | 627.              |                      |                | 0.00     |          |
| 21               |              |                              |                                     |                      |                               | 67.            | 45.            | 58.3           | .3935              | 1.0             | 287.     |              | 717.     | 725.              |                      |                | 0.00     |          |
| 22               |              |                              |                                     |                      |                               | 80.            | 65.            | 71.0           | .5635              | 2.7             | 291.     |              | 794.     | 800.              |                      |                | .21      |          |
| 23               |              |                              |                                     |                      |                               | 68.            | 50.            | 61.6           | .3740              | 3.2             | 189.     |              | 747.     | 787.              |                      |                | .03      |          |
| 24               |              |                              |                                     |                      |                               | 70.            | 47.            | 60.4           | .3689              | 2.3             | 339.     |              | 776.     | 700.              |                      |                | 0.00     |          |
| 25               |              |                              |                                     |                      |                               | 77.            | 54.            | 65.5           | .4786              | 2.6             | 291.     |              | 763.     | 760.              |                      |                | .02      |          |
| 26               |              |                              |                                     |                      |                               | 73.            | 53.            | 62.7           | .4466              | 2.7             | 339.     |              | 782.     | 710.              |                      |                | 0.00     |          |
| 27               |              |                              |                                     |                      |                               | 65.            | 36.            | 51.5           | .3262              | 3.0             | 57.      |              | 556.     | 757.              |                      |                | .57      |          |
| 28               |              |                              |                                     |                      |                               | 53.            | 35.            | 45.2           | .2389              | 1.9             | 291.     |              | 636.     | 635.              |                      |                | .07      |          |
| 29               |              |                              |                                     |                      |                               | 47.            | 42.            | 44.5           | .2471              | 1.9             | 108.     |              | 620.     | 707.              |                      |                | .17      |          |
| 30               |              |                              |                                     |                      |                               | 48.            | 38.            | 42.8           | .2308              | 1.5             | 156.     |              | 655.     | 684.              |                      |                | .02      |          |
| MONTHLY AVERAGE= |              |                              |                                     |                      |                               | 62.            | 46.            | 53.9           | 46.4               | 2.5             | 255.     |              | 693.     | 705.              |                      | TOTAL=         | 3.60     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QH=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE -- INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 10/70

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COUPSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                  |                       |                      |                               | 51.            | 36.            | 44.2           | .2331              | 1.2             | 151.     |        | 674.     | 692.                          |                | 0.00     |          |
| 2                |              |                              |                  |                       |                      |                               | 51.            | 36.            | 45.3           | .2598              | 2.8             | 56.      |        | 705.     | 720.                          |                | 0.00     |          |
| 3                |              |                              |                  |                       |                      |                               | 58.            | 43.            | 50.5           | .3176              | 3.3             | 95.      |        | 587.     | 744.                          |                | .35      |          |
| 4                |              |                              |                  |                       |                      |                               | 49.            | 36.            | 41.9           | .2133              | 2.7             | 184.     |        | 568.     | 665.                          |                | 0.00     |          |
| 5                |              |                              |                  |                       |                      |                               | 46.            | 31.            | 39.2           | .1922              | 2.2             | 175.     |        | 597.     | 653.                          |                | .08      |          |
| 6                |              |                              |                  |                       |                      |                               | 59.            | 30.            | 45.6           | .2190              | 1.5             | 360.     |        | 655.     | 563.                          |                | 0.00     |          |
| 7                |              |                              |                  |                       |                      |                               | 69.            | 51.            | 57.5           | .3505              | 1.2             | 281.     |        | 766.     | 692.                          |                | 0.00     |          |
| 8                |              |                              |                  |                       |                      |                               | 72.            | 50.            | 58.2           | .3799              | 1.0             | 294.     |        | 733.     | 684.                          |                | 0.00     |          |
| 9                |              |                              |                  |                       |                      |                               | 75.            | 50.            | 62.2           | .3565              | 1.7             | 334.     |        | 689.     | 667.                          |                | 0.00     |          |
| 10               |              |                              |                  |                       |                      |                               | 70.            | 54.            | 60.9           | .3576              | 3.9             | 329.     |        | 710.     | 661.                          |                | 0.00     |          |
| 11               |              |                              |                  |                       |                      |                               | 57.            | 53.            | 55.4           | .3899              | 1.3             | 57.      |        | 734.     | 779.                          |                | .12      |          |
| 12               |              |                              |                  |                       |                      |                               | 62.            | 55.            | 57.9           | .4101              | 1.7             | 109.     |        | 789.     | 781.                          |                | .02      |          |
| 13               |              |                              |                  |                       |                      |                               | 60.            | 57.            | 58.5           | .4274              | .8              | 57.      |        | 809.     | 798.                          |                | .07      |          |
| 14               |              |                              |                  |                       |                      |                               | 65.            | 59.            | 61.5           | .4541              | 3.0             | 119.     |        | 771.     | 799.                          |                | .17      |          |
| 15               |              |                              |                  |                       |                      |                               | 61.            | 43.            | 54.7           | .3666              | 2.9             | 39.      |        | 592.     | 777.                          |                | .50      |          |
| 16               |              |                              |                  |                       |                      |                               | 42.            | 30.            | 37.2           | .1726              | 4.0             | 137.     |        | 624.     | 649.                          |                | .05      |          |
| 17               |              |                              |                  |                       |                      |                               | 34.            | 27.            | 30.2           | .1140              | 3.0             | 169.     |        | 572.     | 595.                          |                | .04      |          |
| 18               |              |                              |                  |                       |                      |                               | 49.            | 28.            | 38.1           | .1540              | 2.7             | 137.     |        | 567.     | 652.                          |                | .09      |          |
| 19               |              |                              |                  |                       |                      |                               | 42.            | 25.            | 32.3           | .0957              | 2.1             | 324.     |        | 483.     | 471.                          |                | 0.00     |          |
| 20               |              |                              |                  |                       |                      |                               | 51.            | 23.            | 36.7           | .1051              | 1.8             | 324.     |        | 515.     | 486.                          |                | 0.00     |          |
| 21               |              |                              |                  |                       |                      |                               | 51.            | 32.            | 44.0           | .1840              | 1.1             | 139.     |        | 694.     | 680.                          |                | 0.00     |          |
| 22               |              |                              |                  |                       |                      |                               | 55.            | 46.            | 49.6           | .2920              | 1.9             | 107.     |        | 605.     | 727.                          |                | .20      |          |
| 23               |              |                              |                  |                       |                      |                               | 56.            | 51.            | 54.1           | .3689              | 1.4             | 51.      |        | 693.     | 771.                          |                | .43      |          |
| 24               |              |                              |                  |                       |                      |                               | 54.            | 47.            | 50.0           | .3014              | 4.4             | 94.      |        | 765.     | 733.                          |                | 0.00     |          |
| 25               |              |                              |                  |                       |                      |                               | 47.            | 43.            | 45.0           | .2263              | 1.2             | 84.      |        | 743.     | 707.                          |                | 0.00     |          |
| 26               |              |                              |                  |                       |                      |                               | 49.            | 39.            | 44.5           | .2447              | .8              | 80.      |        | 709.     | 706.                          |                | 0.00     |          |
| 27               |              |                              |                  |                       |                      |                               | 46.            | 27.            | 36.4           | .1578              | 1.2             | 197.     |        | 597.     | 590.                          |                | 0.00     |          |
| 28               |              |                              |                  |                       |                      |                               | 52.            | 24.            | 35.7           | .1096              | 1.2             | 301.     |        | 486.     | 466.                          |                | 0.00     |          |
| 29               |              |                              |                  |                       |                      |                               | 50.            | 27.            | 36.0           | .1254              | .9              | 257.     |        | 538.     | 519.                          |                | 0.00     |          |
| 30               |              |                              |                  |                       |                      |                               | 51.            | 26.            | 35.5           | .1363              | 1.0             | 282.     |        | 512.     | 481.                          |                | 0.00     |          |
| 31               |              |                              |                  |                       |                      |                               | 52.            | 27.            | 38.8           | .1274              | 1.3             | 242.     |        | 502.     | 542.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |        | 645.     | 660.                          | TOTAL=         | 2.12     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 11/70

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COUSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALBEDO<br>LY | QA<br>LY | BAKER<br>QA<br>LY | ANDERSON<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------|----------------------|----------------|----------|----------|
| 1                |              |                              |                  |                      |                      |                               | 58.            | 36.            | 44.5           | .1649              | .8              | 192.     | M            | 623.     | 623.              |                      |                | 0.00     |          |
| 2                |              |                              |                  |                      |                      |                               | 61.            | 39.            | 49.3           | .2126              | .9              | 212.     | M            | 633.     | 626.              |                      |                | 0.00     |          |
| 3                |              |                              |                  |                      |                      |                               | 49.            | 28.            | 40.2           | .1770              | 2.7             | 221.     | M            | 559.     | 564.              |                      |                | 0.00     |          |
| 4                |              |                              |                  |                      |                      |                               | 50.            | 29.            | 37.0           | .1723              | .8              | 227.     | M            | 600.     | 537.              |                      |                | 0.00     |          |
| 5                |              |                              |                  |                      |                      |                               | 36.            | 31.            | 33.1           | .1599              | 3.1             | 80.      | M            | 633.     | 638.              |                      |                | .09      |          |
| 6                |              |                              |                  |                      |                      |                               | 39.            | 29.            | 34.2           | .1234              | 4.5             | 247.     | M            | 578.     | 485.              |                      |                | 0.00     |          |
| 7                |              |                              |                  |                      |                      |                               | 49.            | 27.            | 39.8           | .1680              | 3.7             | 102.     | M            | 610.     | 661.              |                      |                | 0.00     |          |
| 8                |              |                              |                  |                      |                      |                               | 42.            | 21.            | 30.3           | .0799              | 1.0             | 234.     | M            | 479.     | 472.              |                      |                | 0.00     |          |
| 9                |              |                              |                  |                      |                      |                               | 47.            | 24.            | 33.9           | .1303              | 2.1             | 230.     | M            | 506.     | 493.              |                      |                | 0.00     |          |
| 10               |              |                              |                  |                      |                      |                               | 47.            | 34.            | 41.6           | .2144              | 2.9             | 50.      | M            | 669.     | 695.              |                      |                | .05      |          |
| 11               |              |                              |                  |                      |                      |                               | 51.            | 47.            | 49.7           | .3116              | 2.7             | 31.      | M            | 658.     | 746.              |                      |                | .29      |          |
| 12               |              |                              |                  |                      |                      |                               | 48.            | 40.            | 44.2           | .2064              | 3.4             | 131.     | M            | 654.     | 657.              |                      |                | 0.00     |          |
| 13               |              |                              |                  |                      |                      |                               | 51.            | 38.            | 42.9           | .2256              | 1.7             | 81.      | M            | 735.     | 686.              |                      |                | 0.00     |          |
| 14               |              |                              |                  |                      |                      |                               | 42.            | 37.            | 38.7           | .1977              | 2.1             | 28.      | M            | 664.     | 684.              |                      |                | .01      |          |
| 15               |              |                              |                  |                      |                      |                               | 37.            | 32.            | 33.1           | .1677              | .8              | 32.      | .90          | 483.     | 652.              |                      |                | .57      |          |
| 16               |              |                              |                  |                      |                      |                               | 34.            | 20.            | 28.6           | .1291              | 3.0             | 55.      | .90          | 578.     | 621.              |                      |                | .06      |          |
| 17               |              |                              |                  |                      |                      |                               | 32.            | 23.            | 28.2           | .1296              | 1.1             | 31.      | .90          | 617.     | 627.              |                      |                | 0.00     |          |
| 18               |              |                              |                  |                      |                      |                               | 35.            | 25.            | 30.4           | .1375              | .9              | 149.     | .68          | 608.     | 554.              |                      |                | 0.00     |          |
| 19               |              |                              |                  |                      |                      |                               | 35.            | 32.            | 33.8           | .1714              | 1.2             | 29.      | .69          | 606.     | 656.              |                      |                | .20      |          |
| 20               |              |                              |                  |                      |                      |                               | 43.            | 33.            | 37.2           | .2017              | 3.0             | 13.      | .10          | 670.     | 678.              |                      |                | .21      |          |
| 21               |              |                              |                  |                      |                      |                               | 44.            | 31.            | 36.3           | .1744              | 4.0             | 70.      | .13          | 486.     | 652.              |                      |                | .26      |          |
| 22               |              |                              |                  |                      |                      |                               | 39.            | 29.            | 34.6           | .1496              | 2.8             | 66.      | .17          | 604.     | 645.              |                      |                | .04      |          |
| 23               |              |                              |                  |                      |                      |                               | 40.            | 16.            | 28.5           | .1274              | 3.3             | 61.      | .87          | 493.     | 615.              |                      |                | .14      |          |
| 24               |              |                              |                  |                      |                      |                               | 23.            | 9.             | 16.3           | .0714              | 3.0             | 188.     | .70          | 393.     | 414.              |                      |                | .02      |          |
| 25               |              |                              |                  |                      |                      |                               | 21.            | 10.            | 14.8           | .0680              | 1.4             | 153.     | .80          | 441.     | 458.              |                      |                | 0.00     |          |
| 26               |              |                              |                  |                      |                      |                               | 26.            | 10.            | 20.6           | .0877              | 1.8             | 52.      | .87          | 542.     | 579.              |                      |                | 0.00     |          |
| 27               |              |                              |                  |                      |                      |                               | 33.            | 27.            | 30.5           | .1335              | .9              | 33.      | .76          | 661.     | 637.              |                      |                | 0.00     |          |
| 28               |              |                              |                  |                      |                      |                               | 34.            | 30.            | 33.0           | .1655              | 1.6             | 11.      | .45          | 584.     | 655.              |                      |                | .43      |          |
| 29               |              |                              |                  |                      |                      |                               | 32.            | 29.            | 30.5           | .1453              | 2.8             | 45.      | .49          | 650.     | 632.              |                      |                | .06      |          |
| 30               |              |                              |                  |                      |                      |                               | 36.            | 30.            | 33.7           | .1632              | 3.1             | 39.      | .62          | 582.     | 651.              |                      |                | .08      |          |
| MONTHLY AVERAGE= |              |                              |                  |                      |                      |                               | 40.            | 28.            | 34.3           | 28.9               | 2.2             | 103.     | M            | 587.     | 610.              | TOTAL=               | 2.55           |          |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW Q2=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 12/70

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                | 0900         | 0.0                          |                  |                       | 0.0                  | 0.0                           | 35.            | 19.            | 29.5           | .1183              | 3.1             | 169.     | .16    | 549.     | 473.                          | M              | 0.00     |          |
| 2                | 0900         | 0.0                          |                  |                       | 0.0                  | 0.0                           | 52.            | 34.            | 41.7           | .1610              | 4.3             | 146.     | .20    | 563.     | 573.                          | M              | .06      |          |
| 3                | 0900         | 0.0                          |                  |                       | 0.0                  | 0.0                           | 43.            | 28.            | 35.8           | .1039              | 3.4             | 181.     | .23    | 497.     | 469.                          | M              | 0.00     |          |
| 4                | 1100         | 7.0                          |                  |                       | 1.0                  | 1.0                           | 32.            | 10.            | 22.2           | .0997              | 4.1             | 31.      | .87    | 463.     | 595.                          | M              | 1.12     |          |
| 5                |              |                              |                  |                       | 1.0                  | 1.0                           | 18.            | 8.             | 13.3           | .0655              | 2.3             | 176.     | .81    | 437.     | 377.                          | M              | .11      |          |
| 6                |              |                              |                  |                       | 1.4                  | 1.4                           | 19.            | 10.            | 16.0           | .0753              | 4.4             | 86.      | .90    | 506.     | 526.                          | 12.3           | .34      |          |
| 7                | 0900         | 9.1                          | 1.3              | 8.7                   | 1.3                  | 1.3                           | 10.            | -6.            | 5.3            | .0445              | 5.7             | 157.     | .89    | 355.     | 376.                          | M              | 0.00     |          |
| 8                | 0855         | 7.6                          | 1.2              | 7.7                   | 1.2                  | 1.2                           | 4.             | -5.            | .7             | .0380              | 1.0             | 69.      | .88    | 433.     | 472.                          | M              | .02      |          |
| 9                | 1010         | 10.0                         | 1.5              | 10.9                  | 1.9                  | 1.9                           | 24.            | 5.             | 15.7           | .0793              | 1.5             | 26.      | .90    | 567.     | 564.                          | 13.0           | .73      |          |
| 10               | 1415         | 12.7                         |                  |                       | 2.0                  | 2.0                           | 30.            | 12.            | 18.1           | .0834              | 3.4             | 42.      | .88    | 559.     | 569.                          | 14.3           | .12      |          |
| 11               | 1600         | 12.1                         | 2.0              | 12.3                  | 2.0                  | 2.0                           | 14.            | 1.             | 10.0           | .0578              | 1.3             | 88.      | .90    | 482.     | 494.                          | M              | 0.00     |          |
| 12               |              |                              |                  |                       | 2.0                  | 2.0                           | 15.            | 0.             | 8.0            | .0527              | .3              | 76.      | .80    | 470.     | 497.                          | M              | 0.00     |          |
| 13               |              |                              |                  |                       | 2.2                  | 2.2                           | 20.            | 12.            | 16.5           | .0817              | .2              | 39.      | .90    | 588.     | 563.                          | 14.2           | .23      |          |
| 14               | 0900         | 14.3                         | 2.5              | 14.9                  | 2.3                  | 2.3                           | 21.            | 7.             | 14.2           | .0723              | 2.8             | 91.      | .90    | 532.     | 509.                          | M              | .10      |          |
| 15               | 0900         | 14.3                         |                  |                       | 2.3                  | 2.3                           | 14.            | -3.            | 5.0            | .0446              | 1.4             | 133.     | .86    | 391.     | 410.                          | M              | 0.00     |          |
| 16               | 0900         | 13.3                         | 2.5              | 14.2                  | 2.3                  | 2.3                           | 13.            | -4.            | 6.6            | .0536              | 1.3             | 122.     | .86    | 455.     | 435.                          | M              | 0.00     |          |
| 17               | 1015         | 17.0                         | 2.9              | 18.1                  | 3.1                  | 3.1                           | 25.            | 12.            | 20.4           | .0994              | 3.6             | 35.      | .90    | 585.     | 583.                          | 18.0           | .65      |          |
| 18               | 0945         | 17.5                         | 3.1              | 17.6                  | 2.9                  | 2.9                           | 19.            | 13.            | 17.3           | .0812              | 5.2             | 63.      | .90    | 565.     | 551.                          | 13.6           | .03      |          |
| 19               |              |                              |                  |                       | 3.0                  | 3.0                           | 29.            | 17.            | 20.5           | .0969              | 2.7             | 21.      | .90    | 608.     | 589.                          | 17.4           | .17      |          |
| 20               |              |                              |                  |                       | 3.0                  | 3.0                           | 25.            | 8.             | 16.7           | .0745              | 6.1             | 167.     | .88    | 477.     | 398.                          | 9.4            | .08      |          |
| 21               | 0900         | 16.7                         | 3.3              | 18.4                  | 3.1                  | 3.1                           | 13.            | -15.           | 1.0            | .0350              | 2.2             | 141.     | .89    | 391.     | 381.                          | M              | .05      |          |
| 22               | 0900         | 15.7                         | 3.4              | 17.6                  | 3.5                  | 3.5                           | 6.             | -15.           | -3.5           | .0280              | .5              | 64.      | .86    | 455.     | 458.                          | -11.9          | .41      |          |
| 23               | 0915         | 24.5                         | 3.9              | 25.6                  | 4.3                  | 4.3                           | 12.            | 5.             | 9.3            | .0587              | .6              | 138.     | .88    | 519.     | 423.                          | 1.6            | .06      |          |
| 24               |              |                              |                  |                       | 4.3                  | 4.3                           | 20.            | 6.             | 15.5           | .0767              | 6.1             | 31.      | .90    | 544.     | 562.                          | 11.5           | .71      |          |
| 25               |              |                              |                  |                       | 4.3                  | 4.3                           | 20.            | 0.             | 7.4            | .0520              | 1.8             | 173.     | .80    | 424.     | 352.                          | M              | .03      |          |
| 26               |              |                              |                  |                       | 4.3                  | 4.3                           | 15.            | 9.             | 11.8           | .0727              | 6.1             | 90.      | .89    | 540.     | 502.                          | 7.4            | .07      |          |
| 27               |              |                              |                  |                       | 4.2                  | 4.2                           | 13.            | 8.             | 10.0           | .0639              | 6.4             | 114.     | .87    | 513.     | 466.                          | 4.8            | .02      |          |
| 28               |              |                              |                  |                       | 4.2                  | 4.2                           | 8.             | 3.             | 4.5            | .0470              | 7.5             | 63.      | .89    | 516.     | 494.                          | .1             | 0.00     |          |
| 29               | 0900         | 20.0                         | 4.4              | 22.0                  | 4.2                  | 4.2                           | 10.            | 1.             | 5.6            | .0453              | 7.5             | 109.     | .85    | 464.     | 454.                          | -1.7           | 0.00     |          |
| 30               | 0900         | 19.2                         | 4.4              | 20.6                  | 4.0                  | 4.0                           | 6.             | 0.             | 1.5            | .0354              | 7.8             | 129.     | .80    | 446.     | 411.                          | M              | 0.00     |          |
| 31               | 0900         | 18.0                         | 4.2              | 19.3                  | 4.0                  | 4.0                           | 17.            | 5.             | 9.4            | .0481              | 4.3             | 170.     | .85    | 397.     | 377.                          | M              | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               | 19.            | 6.             | 13.1           | 9.5                | 3.5             | 101.     | .76    | 493.     | 481.                          | TOTAL=         | 5.11     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VERMONT-- 1/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>MPH<br>U | OI<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                  |                       |                      | 4.0                           | 22.            | 4.             | 14.7           | .0656              | 2.3             | 51.      | .88    | 550.     | 549.                          | 5.3            | .02      |          |
| 2                |              |                              |                  |                       |                      | 4.0                           | 23.            | 10.            | 17.2           | .0758              | 1.7             | 161.     | .83    | 545.     | 433.                          | 8.0            | .09      |          |
| 3                |              |                              |                  |                       |                      | 4.1                           | 25.            | 13.            | 20.6           | .0903              | 6.5             | 91.      | .84    | 503.     | 547.                          | 11.2           | 0.00     |          |
| 4                | 0900         | 16.8                         | 4.2              | 18.6                  |                      | 4.0                           | 28.            | 6.             | 19.3           | .0906              | 2.0             | 50.      | .90    | 573.     | 573.                          | M              | 0.00     |          |
| 5                | 0900         | 16.3                         | 4.2              | 17.7                  | .20                  | 4.2                           | 34.            | 23.            | 29.6           | .1340              | 4.3             | 21.      | .81    | 553.     | 636.                          | 24.2           | .10      |          |
| 6                | 0900         | 16.1                         | 4.0              | 17.4                  | .30                  | 4.1                           | 23.            | 18.            | 20.9           | .0742              | 4.5             | 73.      | .79    | 529.     | 566.                          | 12.1           | 0.00     |          |
| 7                | 0900         | 19.2                         | 4.1              | 21.0                  | .03                  | 4.3                           | 18.            | -2.            | 12.8           | .0632              | 4.8             | 84.      | .87    | 526.     | 519.                          | 6.7            | .17      |          |
| 8                | 1000         | 18.6                         | 4.3              | 20.5                  | .05                  | 4.4                           | 2.             | -14.           | -5.9           | .0222              | 2.5             | 194.     | .82    | 306.     | 295.                          | M              | .01      |          |
| 9                |              |                              |                  |                       |                      | 4.3                           | 11.            | -11.           | .3             | .0286              | .6              | 167.     | .82    | 370.     | 367.                          | M              | 0.00     |          |
| 10               |              |                              |                  |                       |                      | 4.3                           | 19.            | 1.             | 12.6           | .0670              | 1.9             | 83.      | .89    | 539.     | 521.                          | 3.5            | .01      |          |
| 11               | 0900         | 19.5                         | 4.5              | 21.2                  | .06                  | 4.4                           | 25.            | 20.            | 22.9           | .1047              | 1.4             | 100.     | .86    | 590.     | 556.                          | 16.0           | .13      |          |
| 12               | 0900         | 20.8                         | 4.5              | 22.5                  | .06                  | 4.6                           | 24.            | -20.           | 4.3            | .0402              | 4.0             | 133.     | .86    | 437.     | 437.                          | M              | .09      |          |
| 13               | 0900         | 20.1                         | 4.7              | 22.2                  | .07                  | 4.5                           | -0.            | -23.           | -12.0          | .0146              | 1.2             | 200.     | .82    | 316.     | 280.                          | M              | 0.00     |          |
| 14               | 0900         | 19.2                         | 4.8              | 22.0                  | .09                  | 4.6                           | 19.            | -3.            | 9.2            | .0506              | 3.2             | 16.      | .90    | 558.     | 537.                          | 5.0            | .13      |          |
| 15               | 0900         | 21.0                         | 4.7              | 22.5                  | .08                  | 4.4                           | 19.            | -2.            | 11.9           | .0630              | 4.2             | 116.     | .86    | 536.     | 494.                          | 5.5            | .07      |          |
| 16               |              |                              |                  |                       |                      | 4.8                           | -3.            | -11.           | -7.0           | .0194              | 5.5             | 214.     | .78    | 283.     | 286.                          | M              | .02      |          |
| 17               |              |                              |                  |                       |                      | 4.8                           | -3.            | -17.           | -11.3          | .0164              | 1.7             | 176.     | .78    | 307.     | 332.                          | M              | .01      |          |
| 18               | 0900         | 19.6                         | 4.7              | 21.4                  | .13                  | 4.8                           | -7.            | -20.           | -12.9          | .0146              | 3.6             | 209.     | .81    | 275.     | 281.                          | M              | 0.00     |          |
| 19               | 0900         | 19.3                         | 4.9              | 21.3                  | .14                  | 4.7                           | -4.            | -23.           | -12.6          | .0155              | 1.9             | 153.     | .84    | 342.     | 360.                          | M              | 0.00     |          |
| 20               | 0900         | 19.2                         | 5.0              | 21.2                  | .18                  | 4.5                           | 1.             | -12.           | -4.2           | .0235              | 5.0             | 175.     | .82    | 334.     | 368.                          | M              | 0.00     |          |
| 21               | 0900         | 18.7                         | 4.8              | 20.6                  | .16                  | 4.6                           | 15.            | -8.            | 4.8            | .0440              | 1.6             | 59.      | .88    | 499.     | 505.                          | M              | .21      |          |
| 22               | 1000         | 26.0                         | 5.2              | 26.9                  | .08                  | 5.0                           | 24.            | 5.             | 16.5           | .0727              | 2.6             | 124.     | .88    | 509.     | 516.                          | M              | .24      |          |
| 23               |              |                              |                  |                       |                      | 5.2                           | 27.            | 15.            | 21.1           | .0869              | 3.6             | 56.      | .90    | 541.     | 583.                          | 12.2           | .17      |          |
| 24               |              |                              |                  |                       |                      | 5.2                           | 29.            | 7.             | 20.3           | .0901              | 2.8             | 160.     | .85    | 510.     | 501.                          | 8.9            | 0.00     |          |
| 25               | 0900         | 25.0                         | 5.4              | 27.3                  | .11                  | 5.2                           | 37.            | 23.            | 28.1           | .1108              | 2.4             | 167.     | .85    | 580.     | 533.                          | 17.3           | 0.00     |          |
| 26               | 0900         | 25.0                         | 5.5              | 26.3                  | .11                  | 6.0                           | 33.            | 16.            | 28.1           | .1372              | 4.1             | 16.      | .90    | 523.     | 629.                          | 24.1           | 1.05     |          |
| 27               | 1030         | 31.8                         | 6.6              | 34.3                  | .13                  | 6.1                           | 13.            | -13.           | -2.9           | .0285              | 4.8             | 83.      | .90    | 460.     | 463.                          | M              | .22      |          |
| 28               | 0900         | 31.0                         | 6.7              | 33.2                  | .11                  | 6.1                           | -3.            | -15.           | -9.8           | .0187              | 2.1             | 141.     | .89    | 374.     | 398.                          | M              | .05      |          |
| 29               | 0900         | 30.8                         | 6.9              | 32.8                  | .16                  | 6.1                           | 10.            | -15.           | -3.            | .0307              | 2.1             | 199.     | .86    | 396.     | 380.                          | M              | .05      |          |
| 30               |              |                              |                  |                       |                      | 6.4                           | 21.            | 0.             | 14.2           | .0660              | 3.9             | 150.     | .87    | 447.     | 494.                          | 10.4           | .29      |          |
| 31               |              |                              |                  |                       |                      | 6.6                           | 6.             | -13.           | -3.            | .0302              | 1.4             | 190.     | .90    | 367.     | 395.                          | M              | .06      |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |        |          | 462.                          | TOTAL=         | 3.19     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE (ATP) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION<sup>(1)</sup>

TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QN=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED

M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN

NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 2/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                | 0900         | 32.7                         | 7.1              | 35.0                  | .06                  | 6.8                           | 1.             | -13.           | -5.9           | .0225              | 1.6             | 160.     | .88    | 334.     | 408.                          | M              | .02      |          |
| 2                | 0900         | 32.5                         |                  |                       | .08                  | 6.8                           | -5.            | -23.           | -11.1          | .0168              | 2.4             | 190.     | .86    | 360.     | 364.                          | M              | .03      |          |
| 3                | 0900         | 31.8                         | 7.4              | 33.4                  | .08                  | 6.8                           | 2.             | -24.           | -11.3          | .0177              | .9              | 270.     | .77    | 285.     | 281.                          | M              | .02      |          |
| 4                | 0900         | 31.3                         | 7.4              | 33.0                  | .09                  | 6.8                           | 10.            | -12.           | 1.1            | .0322              | 1.0             | 249.     | .80    | 374.     | 357.                          | M              | 0.00     |          |
| 5                | 0900         | 32.1                         | 7.6              | 34.4                  | .09                  | 7.3                           | 24.            | 9.             | 17.6           | .0843              | 3.7             | 43.      | .86    | 561.     | 573.                          | M              | .42      |          |
| 6                |              |                              |                  |                       |                      | 7.3                           | 30.            | 11.            | 23.5           | .0987              | 2.3             | 177.     | .83    | 512.     | 533.                          | M              | .05      |          |
| 7                |              |                              |                  |                       |                      | 7.5                           | 25.            | 9.             | 19.2           | .0783              | 1.4             | 181.     | .75    | 516.     | 511.                          | M              | .10      |          |
| 8                |              |                              |                  |                       |                      | 8.7                           | 33.            | 23.            | 27.1           | .1247              | 2.7             | 201.     | .88    | 564.     | 534.                          | M              | .25      |          |
| 9                | 1030         | 38.7                         | 8.7              | 37.9                  | .25                  | 8.8                           | 30.            | 12.            | 23.6           | .1140              | 3.5             | 50.      | .84    | 563.     | 602.                          | M              | .21      |          |
| 10               | 0900         | 39.6                         | 9.1              | 38.8                  | .05                  | 8.9                           | 10.            | -4.            | 6.1            | .0472              | 2.7             | 174.     | .85    | 436.     | 462.                          | M              | .03      |          |
| 11               | 0900         | 38.7                         | 9.0              | 37.5                  | .14                  | 8.9                           | 21.            | -1.            | 12.8           | .0646              | 3.3             | 164.     | .85    | 512.     | 500.                          | M              | .02      |          |
| 12               | 0900         | 38.1                         | 9.0              | 36.6                  | .13                  | 8.9                           | 35.            | 21.            | 29.0           | .1384              | 2.9             | 69.      | .87    | 630.     | 625.                          | M              | .02      |          |
| 13               |              |                              |                  |                       |                      | 9.1                           | 41.            | 31.            | 35.9           | .1846              | 1.7             | 22.      | .82    | 581.     | 670.                          | M              | .46      |          |
| 14               |              |                              |                  |                       |                      | 9.1                           | 41.            | 9.             | 23.3           | .1075              | 7.6             | 88.      | .84    | 559.     | 591.                          | M              | .28      |          |
| 15               | 0900         | 31.7                         | 9.3              | 33.5                  | .27                  | 9.0                           | 20.            | 6.             | 12.9           | .0530              | 5.2             | 258.     | .78    | 431.     | 432.                          | M              | .01      |          |
| 16               | 0900         | 31.7                         | 9.4              | 33.7                  | .28                  | 8.7                           | 18.            | 1.             | 9.5            | .0392              | 4.1             | 322.     | .78    | 352.     | 353.                          | M              | 0.00     |          |
| 17               |              |                              |                  |                       |                      | 8.7                           | 27.            | 0.             | 15.7           | .0526              | 3.3             | 222.     | .74    | 490.     | 481.                          | M              | .04      |          |
| 18               | 0900         | 32.1                         | 9.3              | 33.0                  | .28                  | 8.8                           | 39.            | 24.            | 29.9           | .1404              | 3.4             | 207.     | .76    | 593.     | 563.                          | M              | .10      |          |
| 19               | 0900         | 31.6                         | 9.4              | 33.8                  | .27                  | 8.9                           | 30.            | 15.            | 23.2           | .0871              | 4.4             | 298.     | .79    | 511.     | 452.                          | M              | .02      |          |
| 20               |              |                              |                  |                       |                      | 9.7                           | 24.            | 19.            | 22.4           | .1015              | 2.4             | 28.      | .86    | 618.     | 600.                          | M              | .57      |          |
| 21               |              |                              |                  |                       |                      | 9.8                           | 24.            | 15.            | 20.8           | .1041              | 1.7             | 35.      | .90    | 608.     | 591.                          | M              | .09      |          |
| 22               | 0900         | 35.3                         | 10.4             | 37.9                  | .14                  | 9.8                           | 23.            | 12.            | 17.6           | .0884              | .8              | 111.     | .82    | 563.     | 558.                          | M              | 0.00     |          |
| 23               | 0900         | 37.7                         | 10.3             | 39.4                  | .17                  | 10.6                          | 25.            | 11.            | 20.8           | .1043              | 1.4             | 37.      | .90    | 580.     | 591.                          | M              | .74      |          |
| 24               | 0900         | 42.6                         | 10.6             | 43.6                  | .10                  | 10.6                          | 27.            | 10.            | 19.8           | .0890              | 2.6             | 324.     | .87    | 519.     | 430.                          | M              | .09      |          |
| 25               | 0900         | 42.5                         | 10.8             | 43.6                  | .10                  | 10.7                          | 29.            | 10.            | 22.2           | .1030              | 1.7             | 149.     | .80    | 576.     | 567.                          | M              | .04      |          |
| 26               | 0900         | 42.0                         | 10.8             | 42.4                  | .10                  | 10.6                          | 36.            | 16.            | 28.1           | .1183              | 1.6             | 357.     | .78    | 507.     | 441.                          | M              | 0.00     |          |
| 27               |              |                              |                  |                       |                      | 10.6                          | 36.            | 32.            | 33.6           | .1689              | 3.7             | 32.      | .81    | 555.     | 658.                          | M              | .13      |          |
| 28               |              |                              |                  |                       |                      | 10.5                          | 36.            | 25.            | 31.9           | .1280              | 5.8             | 236.     | .77    | 585.     | 570.                          | M              | .07      |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |        |          | 511.                          | TOTAL=         | 4.46     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 3/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COURSE<br>WE<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | Q4<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                | 0900         | 37.7                         | 10.6                       | .18                  | 10.5                          | 31.            | 22.            | 26.1           | .0978              | 5.3             | 335.     | .76          | 530.     | 476.                          | 21.7           | .05      |          |
| 2                | 0900         | 36.5                         | 10.7                       | .23                  | 10.5                          | 27.            | 8.             | 18.3           | .0662              | 3.0             | 366.     | .76          | 435.     | 416.                          | M              | 0.00     |          |
| 3                | 0900         | 36.3                         | 10.9                       | .26                  | 10.6                          | 23.            | 10.            | 17.7           | .0787              | 1.6             | 148.     | .82          | 543.     | 552.                          | 11.7           | .33      |          |
| 4                | 1000         | 43.2                         | 11.6                       | .15                  | 11.7                          | 23.            | 16.            | 19.5           | .0971              | 6.5             | 55.      | .85          | 587.     | 583.                          | 19.9           | .97      |          |
| 5                |              |                              |                            |                      | 11.9                          | 21.            | 14.            | 17.2           | .0815              | 8.6             | 233.     | .89          | 556.     | 514.                          | 17.8           | .43      |          |
| 6                |              |                              |                            |                      | 12.0                          | 27.            | 12.            | 18.0           | .0710              | 4.1             | 367.     | .84          | 439.     | 428.                          | 8.8            | 0.00     |          |
| 7                |              |                              |                            |                      | 13.1                          | 26.            | 17.            | 22.2           | .1069              | 1.6             | 43.      | .90          | 619.     | 598.                          | 21.6           | .88      |          |
| 8                | 0900         | 55.7                         | 12.9                       | .09                  | 13.2                          | 25.            | 14.            | 20.2           | .0910              | 5.0             | 282.     | .80          | 550.     | 504.                          | 18.5           | .07      |          |
| 9                | 1045         | 52.7                         |                            | .08                  | 13.0                          | 17.            | 8.             | 12.6           | .0605              | 4.9             | 235.     | .85          | 494.     | 496.                          | 7.4            | .04      |          |
| 10               | 0900         | 51.7                         | 12.6                       | .10                  | 13.0                          | 24.            | 10.            | 17.0           | .0566              | 3.9             | 396.     | .83          | 467.     | 411.                          | 8.3            | 0.00     |          |
| 11               | 0900         | 53.7                         | 12.9                       | .12                  | 13.2                          | 30.            | 18.            | 24.6           | .1162              | 2.4             | 132.     | .89          | 627.     | 594.                          | 24.8           | .31      |          |
| 12               | 0900         | 51.4                         | 13.0                       | .11                  | 13.2                          | 26.            | 9.             | 20.0           | .0866              | 4.4             | 352.     | .83          | 528.     | 466.                          | 15.2           | .04      |          |
| 13               |              |                              |                            |                      | 13.2                          | 35.            | 8.             | 23.8           | .0905              | 2.3             | 391.     | .76          | 485.     | 456.                          | M              | 0.00     |          |
| 14               |              |                              |                            |                      | 13.2                          | 41.            | 24.            | 32.6           | .1409              | 2.4             | 343.     | .78          | 570.     | 537.                          | 27.0           | 0.00     |          |
| 15               | 0900         | 46.1                         | 14.1                       | .22                  | 11.7                          | 46.            | 27.            | 36.9           | .1871              | 4.2             | 198.     | .76          | 619.     | 638.                          | 29.6           | .10      |          |
| 16               | 0900         | 42.1                         | 13.4                       | .21                  | 12.4                          | 43.            | 27.            | 34.1           | .1466              | 4.3             | 150.     | .78          | 548.     | 640.                          | 27.6           | .07      |          |
| 17               | 0900         | 41.8                         | 13.0                       | .23                  | 12.6                          | 27.            | 16.            | 21.6           | .0809              | 5.1             | 338.     | .76          | 497.     | 492.                          | 17.0           | 0.00     |          |
| 18               | 0900         | 40.8                         | 13.1                       | .23                  | 12.5                          | 23.            | 9.             | 17.9           | .0614              | 6.0             | 488.     | .75          | 401.     | 367.                          | M              | 0.00     |          |
| 19               | 0900         | 40.6                         | 13.2                       | .25                  | 12.5                          | 30.            | 12.            | 23.1           | .0823              | 2.9             | 274.     | .77          | 532.     | 538.                          | M              | .43      |          |
| 20               |              |                              |                            |                      | 13.2                          | 31.            | 24.            | 27.1           | .1234              | 2.5             | 166.     | .90          | 630.     | 601.                          | 25.2           | .32      |          |
| 21               |              |                              |                            |                      | 13.8                          | 27.            | 23.            | 24.7           | .1079              | 6.5             | 166.     | .90          | 621.     | 589.                          | 23.6           | .30      |          |
| 22               | 0900         | 47.3                         | 14.5                       | .13                  | 14.0                          | 31.            | 13.            | 23.0           | .0779              | 4.5             | 455.     | .87          | 489.     | 430.                          | 14.6           | .02      |          |
| 23               | 0900         | 46.1                         | 14.4                       | .14                  | 14.0                          | 25.            | 4.             | 16.4           | .0597              | 4.3             | 419.     | .78          | 431.     | 429.                          | M              | 0.00     |          |
| 24               | 0900         | 45.5                         | 13.8                       | .15                  | 13.8                          | 21.            | 11.            | 15.6           | .0625              | 9.4             | 406.     | .81          | 443.     | 437.                          | 12.4           | 0.00     |          |
| 25               | 0900         | 44.2                         | 13.9                       | .16                  | 13.5                          | 21.            | 7.             | 15.8           | .0617              | 7.4             | 459.     | .83          | 469.     | 404.                          | 12.5           | 0.00     |          |
| 26               | 0900         | 43.8                         |                            |                      | 13.5                          | 27.            | 2.             | 14.6           | .0477              | 3.3             | 528.     | .76          | 393.     | 353.                          | M              | 0.00     |          |
| 27               |              |                              |                            |                      | 13.5                          | 35.            | 8.             | 23.0           | .0519              | 2.5             | 514.     | .81          | 453.     | 396.                          | M              | 0.00     |          |
| 28               |              |                              |                            |                      | 13.4                          | 38.            | 19.            | 28.2           | .0655              | 2.7             | 486.     | .80          | 497.     | 445.                          | 14.8           | 0.00     |          |
| 29               | 0900         | 42.8                         | 13.7                       | .21                  | 13.3                          | 38.            | 27.            | 32.2           | .1110              | 2.5             | 182.     | .80          | 636.     | 626.                          | 28.2           | .02      |          |
| 30               | 0900         | 43.5                         | 13.6                       | .18                  | 13.3                          | 32.            | 24.            | 29.6           | .1225              | 4.1             | 222.     | .86          | 573.     | 601.                          | 25.8           | .13      |          |
| 31               | 0930         | 43.2                         | 13.9                       | .20                  | 13.3                          | 30.            | 18.            | 24.7           | .0787              | 5.9             | 516.     | .79          | 452.     | 418.                          | 16.0           | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                            |                      |                               | 29.            | 15.            | 22.5           | 15.2               | 4.3             | 311.     | .81          | 520.     | 498.                          | TOTAL=         | 4.51     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 4/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON<br>BAKER |                |          |  |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------|----------------|----------|--|
|                  |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |              |          | QA<br>LY          | AVE<br>TS<br>F | PX<br>IN |  |
| 1                | 0930         | 42.2                         | 13.9             | 43.3                  | .25                  | 13.3                          | 40.            | 18.            | 31.5           | .0740              | 3.9             | 430.     | .78          | 518.     | 510.              | 21.0           | 0.00     |  |
| 2                | 0900         | 40.8                         | 14.1             | 43.4                  | .28                  | 12.9                          | 47.            | 34.            | 39.1           | .1852              | 3.2             | 169.     | .75          | 601.     | 668.              | 31.9           | .24      |  |
| 3                |              |                              |                  |                       |                      | 12.9                          | 43.            | 29.            | 35.1           | .1404              | 4.0             | 404.     | .73          | 547.     | 551.              | 30.2           | .10      |  |
| 4                |              |                              |                  |                       |                      | 13.1                          | 32.            | 22.            | 28.3           | .1012              | 4.8             | 279.     | .76          | 543.     | 577.              | 24.9           | 0.00     |  |
| 5                | 0900         | 37.0                         | 13.0             | 38.5                  | .35                  | 12.9                          | 34.            | 16.            | 25.7           | .0795              | 3.5             | 554.     | .73          | 461.     | 409.              | 19.3           | 0.00     |  |
| 6                | 0900         | 36.6                         | 13.1             | 37.5                  | .34                  | 12.8                          | 40.            | 15.            | 28.9           | .0799              | 2.1             | 545.     | .70          | 492.     | 432.              | 20.2           | 0.00     |  |
| 7                | 0900         | 38.2                         | 13.3             | 40.5                  | .11                  | 13.1                          | 35.            | 25.            | 30.0           | .1085              | 6.0             | 235.     | .84          | 627.     | 603.              | 27.5           | .25      |  |
| 8                | 0900         | 36.6                         | 13.1             | 38.7                  | .27                  | 13.3                          | 27.            | 14.            | 22.2           | .0594              | 7.6             | 540.     | .80          | 414.     | 411.              | 14.7           | .02      |  |
| 9                | 0900         | 36.2                         | 12.9             | 37.1                  | .27                  | 13.1                          | 48.            | 13.            | 34.4           | .0786              | 3.1             | 484.     | .75          | 544.     | 507.              | 20.2           | 0.00     |  |
| 10               |              |                              |                  |                       |                      | 13.3                          | 49.            | 32.            | 37.6           | .1641              | 5.9             | 161.     | .67          | 578.     | 664.              | 32.0           | .60      |  |
| 11               |              |                              |                  |                       |                      | 13.0                          | 48.            | 32.            | 38.3           | .1401              | 3.6             | 559.     | .70          | 524.     | 483.              | M              | .38      |  |
| 12               | 0900         | 34.7                         | 13.6             | 35.4                  | .41                  | 12.4                          | 57.            | 29.            | 42.5           | .1354              | 2.1             | 567.     | .67          | 570.     | 498.              | M              | 0.00     |  |
| 13               | 0900         | 32.5                         | 12.3             | 31.2                  | .37                  | 12.1                          | 51.            | 37.            | 43.2           | .1655              | 2.0             | 189.     | .67          | 683.     | 689.              | 30.8           | 0.00     |  |
| 14               | 0930         | 30.2                         | 12.3             | 31.2                  | .36                  | 12.0                          | 41.            | 22.            | 28.9           | .1289              | 7.5             | 117.     | .78          | 621.     | 626.              | M              | .07      |  |
| 15               | 0900         | 30.2                         | 12.2             | 30.9                  | .35                  | 11.9                          | 30.            | 19.            | 25.2           | .0675              | 7.3             | 570.     | .70          | 492.     | 422.              | 19.4           | 0.00     |  |
| 16               | 0900         | 31.8                         | 12.8             | 33.8                  | .05                  | 12.1                          | 29.            | 22.            | 25.0           | .1087              | 2.8             | 208.     | .89          | 590.     | 589.              | 19.8           | .21      |  |
| 17               |              |                              |                  |                       |                      | 12.2                          | 40.            | 24.            | 32.5           | .1100              | 5.5             | 617.     | .77          | 501.     | 433.              | 23.9           | 0.00     |  |
| 18               |              |                              |                  |                       |                      | 11.0                          | 43.            | 30.            | 37.6           | .1532              | 10.3            | 494.     | .57          | 656.     | 538.              | 31.0           | 0.00     |  |
| 19               | 0900         | 26.5                         | 10.9             | 26.1                  | .42                  | 10.0                          | 51.            | 39.            | 44.4           | .1859              | 6.2             | 573.     | .61          | 605.     | 525.              | 32.0           | 0.00     |  |
| 20               | 0900         | 23.3                         | 9.7              | 22.8                  | .41                  | 9.1                           | 51.            | 35.            | 43.1           | .1761              | 4.3             | 604.     | .61          | 615.     | 499.              | 31.5           | 0.00     |  |
| 21               | 0900         | 20.7                         | 8.6              | 20.1                  | .43                  | 8.7                           | 41.            | 33.            | 37.7           | .1957              | 3.2             | 82.      | .61          | 562.     | 678.              | 32.0           | .19      |  |
| 22               | 0900         | 20.5                         | 8.5              | 20.4                  | .32                  | 8.9                           | 34.            | 30.            | 32.6           | .1616              | 5.2             | 205.     | .84          | 555.     | 631.              | 31.5           | .34      |  |
| 23               | 0900         | 20.8                         | 8.6              | 20.1                  | .21                  | 9.0                           | 34.            | 28.            | 31.0           | .1453              | 4.1             | 261.     | .81          | 619.     | 608.              | 30.2           | .05      |  |
| 24               |              |                              |                  |                       |                      | 8.6                           | 49.            | 25.            | 38.1           | .1337              | 3.2             | 503.     | .69          | 573.     | 544.              | M              | 0.00     |  |
| 25               |              |                              |                  |                       |                      | 8.2                           | 41.            | 32.            | 35.5           | .1629              | 6.3             | 297.     | .62          | 631.     | 622.              | M              | .04      |  |
| 26               | 1015         | 18.2                         | 7.6              | 17.3                  | .41                  | 7.9                           | 41.            | 33.            | 36.7           | .1697              | 2.8             | 201.     | .63          | 628.     | 655.              | M              | 0.00     |  |
| 27               | 0900         | 17.1                         | 7.1              | 16.0                  | .42                  | 7.2                           | 43.            | 31.            | 37.0           | .1689              | 3.6             | 258.     | .59          | 595.     | 642.              | 30.6           | 0.00     |  |
| 28               | 0900         | 16.0                         | 6.3              | 14.0                  | .37                  | 6.4                           | 49.            | 30.            | 39.2           | .1660              | 2.8             | 442.     | .60          | 565.     | 587.              | 29.2           | .07      |  |
| 29               |              |                              |                  |                       |                      | 5.9                           | 39.            | 34.            | 36.5           | .1899              | 2.4             | 169.     | .61          | 576.     | 660.              | 32.0           | .07      |  |
| 30               | 0900         | 12.3                         | 4.7              | 10.7                  | .41                  | 5.4                           | 47.            | 34.            | 37.7           | .1954              | 1.8             | 233.     | .64          | 539.     | 654.              | 32.0           | .13      |  |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               | 42.            | 27.            | 34.5           | 25.4               | 4.4             | 365.     | .70          | 567.     | 564               | TOTAL=         | 2.76     |  |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
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 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VERMONT-- 5/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COURSE<br>WE<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>MPH | QI<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                            |                      | 4.6                           | 45.            | 34.            | 40.0           | .1697              | 3.8        | 355.     | .60    | 653.     | 630.                          | 32.0           | 0.00     |          |
| 2                |              |                              |                            |                      | 4.0                           | 46.            | 33.            | 39.4           | .2092              | 1.3        | 206.     | .61    | 563.     | 669.                          | 32.0           | .42      |          |
| 3                | 0900         | 7.8                          | 2.6                        | .43                  | 3.3                           | 41.            | 36.            | 39.4           | .2256              | 1.6        | 86.      | .66    | 545.     | 687.                          | 32.0           | .72      |          |
| 4                | 0900         | 6.0                          | 2.3                        | .44                  | 2.7                           | 39.            | 35.            | 36.7           | .1987              | 4.1        | 117.     | .61    | 576.     | 669.                          | 32.0           | .24      |          |
| 5                | 1000         | 5.2                          | 1.9                        | .41                  | 1.9                           | 49.            | 35.            | 38.6           | .1862              | 3.7        | 289.     | .52    | 549.     | 646.                          | 31.3           | .16      |          |
| 6                | 0900         | 2.0                          |                            | .39                  | .6                            | 57.            | 33.            | 44.5           | .1776              | 2.9        | 557.     | .34    | 620.     | 565.                          | 29.9           | 0.00     |          |
| 7                | 1000         | 0.0                          |                            |                      | .5                            | 57.            | 34.            | 45.0           | .1638              | 4.4        | 601.     | .17    | 626.     | 542.                          | M              | 0.00     |          |
| 8                |              |                              |                            |                      | .5                            | 60.            | 34.            | 47.9           | .1732              | 3.4        | 425.     | .16    | 669.     | 648.                          | M              | .01      |          |
| 9                |              |                              |                            |                      | .5                            | 57.            | 38.            | 45.1           | .2064              | 2.5        | 403.     | M      | 633.     | 644.                          | M              | .0A      |          |
| 10               |              |                              |                            |                      | .5                            | 68.            | 39.            | 55.3           | .1935              | 4.2        | 587.     | M      | 680.     | 608.                          | M              | 0.00     |          |
| 11               |              |                              |                            |                      | .5                            | 73.            | 40.            | 57.7           | .2054              | 3.0        | 655.     | M      | 683.     | 579.                          | M              | 0.00     |          |
| 12               |              |                              |                            |                      | .5                            | 70.            | 44.            | 58.6           | .2709              | 3.5        | 725.     | M      | 771.     | 765.                          | M              | 0.00     |          |
| 13               |              |                              |                            |                      | .5                            | 53.            | 37.            | 43.5           | .2358              | 2.8        | 128.     | M      | 597.     | 706.                          | M              | .26      |          |
| 14               |              |                              |                            |                      | .5                            | 48.            | 32.            | 40.1           | .1556              | 5.0        | 483.     | M      | 572.     | 587.                          | M              | 0.00     |          |
| 15               |              |                              |                            |                      | .5                            | 68.            | 29.            | 49.8           | .1361              | 3.6        | 666.     | M      | 620.     | 534.                          | M              | 0.00     |          |
| 16               |              |                              |                            |                      | .5                            | 60.            | 42.            | 51.0           | .2428              | 3.5        | 370.     | M      | 710.     | 693.                          | M              | 0.00     |          |
| 17               |              |                              |                            |                      | .5                            | 59.            | 46.            | 51.9           | .3053              | 3.7        | 420.     | M      | 691.     | 681.                          | M              | .0A      |          |
| 18               |              |                              |                            |                      | .5                            | 75.            | 43.            | 60.5           | .2906              | 2.2        | 641.     | M      | 727.     | 617.                          | M              | 0.00     |          |
| 19               |              |                              |                            |                      | .5                            | 83.            | 50.            | 67.4           | .3429              | 3.0        | 610.     | M      | 733.     | 676.                          | M              | 0.00     |          |
| 20               |              |                              |                            |                      | .5                            | 77.            | 56.            | 66.0           | .3494              | 3.9        | 570.     | M      | 745.     | 692.                          | M              | 0.00     |          |
| 21               |              |                              |                            |                      | .5                            | 58.            | 46.            | 52.4           | .3287              | 2.5        | 62.      | M      | 563.     | 764.                          | M              | .33      |          |
| 22               |              |                              |                            |                      | .5                            | 49.            | 37.            | 44.6           | .2420              | 3.4        | 188.     | M      | 628.     | 704.                          | M              | .0A      |          |
| 23               |              |                              |                            |                      | .5                            | 49.            | 34.            | 40.8           | .1522              | 4.8        | 710.     | M      | 574.     | 476.                          | M              | 0.00     |          |
| 24               |              |                              |                            |                      | .5                            | 60.            | 34.            | 49.5           | .1570              | 3.4        | 632.     | M      | 626.     | 565.                          | M              | .03      |          |
| 25               |              |                              |                            |                      | .5                            | 59.            | 47.            | 53.4           | .3344              | 2.5        | 171.     | M      | 704.     | 759.                          | M              | .65      |          |
| 26               |              |                              |                            |                      | .5                            | 56.            | 46.            | 51.0           | .2934              | 3.1        | 233.     | M      | 603.     | 733.                          | M              | .12      |          |
| 27               |              |                              |                            |                      | .5                            | 50.            | 45.            | 46.8           | .2683              | 2.3        | 150.     | M      | 603.     | 723.                          | M              | .21      |          |
| 28               |              |                              |                            |                      | .5                            | 57.            | 41.            | 48.5           | .2346              | 3.7        | 325.     | M      | 682.     | 696.                          | M              | .01      |          |
| 29               |              |                              |                            |                      | .5                            | 70.            | 40.            | 56.3           | .2436              | 2.4        | 706.     | M      | 665.     | 564.                          | M              | 0.00     |          |
| 30               |              |                              |                            |                      | .5                            | 71.            | 44.            | 59.0           | .2972              | 2.9        | 595.     | M      | 703.     | 646.                          | M              | 0.00     |          |
| 31               |              |                              |                            |                      | .5                            | 60.            | 43.            | 52.9           | .2061              | 4.1        | 677.     | M      | 671.     | 565.                          | M              | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                            |                      |                               |                |                |                |                    |            |          |        |          |                               |                | 3.40     |          |
| TOTAL=           |              |                              |                            |                      |                               |                |                |                |                    |            |          |        |          |                               |                | 3.40     |          |

THE SYMBOLS USED ARE AS FOLLOWS.  
WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QM=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 6/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COURSE<br>WE<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALBEDO<br>LY | Q4<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                            |                      |                               | 62.            | 40.            | 52.0           | .1399              | 3.6             | 733.     |              | 617.     | 523.                          |                | 0.00     |          |
| 2                |              |                              |                            |                      |                               | 70.            | 39.            | 55.4           | .2249              | 4.0             | 597.     |              | 584.     | 625.                          |                | .13      |          |
| 3                |              |                              |                            |                      |                               | 67.            | 46.            | 56.0           | .3610              | 2.6             | 224.     |              | 740.     | 766.                          |                | .05      |          |
| 4                |              |                              |                            |                      |                               | 67.            | 46.            | 59.6           | .3087              | 4.5             | 428.     |              | 745.     | 728.                          |                | 0.00     |          |
| 5                |              |                              |                            |                      |                               | 58.            | 33.            | 47.2           | .1551              | 4.0             | 749.     |              | 589.     | 502.                          |                | 0.00     |          |
| 6                |              |                              |                            |                      |                               | 65.            | 38.            | 54.2           | .2095              | 2.6             | 496.     |              | 664.     | 668.                          |                | 0.00     |          |
| 7                |              |                              |                            |                      |                               | 82.            | 49.            | 65.8           | .4033              | 2.6             | 629.     |              | 752.     | 673.                          |                | .55      |          |
| 8                |              |                              |                            |                      |                               | 75.            | 52.            | 63.0           | .4779              | 2.7             | 404.     |              | 700.     | 761.                          |                | .48      |          |
| 9                |              |                              |                            |                      |                               | 64.            | 44.            | 54.2           | .2709              | 3.9             | 658.     |              | 589.     | 591.                          |                | 0.00     |          |
| 10               |              |                              |                            |                      |                               | 59.            | 39.            | 50.1           | .1893              | 4.0             | 718.     |              | 616.     | 530.                          |                | 0.00     |          |
| 11               |              |                              |                            |                      |                               | 67.            | 38.            | 56.0           | .2249              | 4.2             | 665.     |              | 649.     | 594.                          |                | 0.00     |          |
| 12               |              |                              |                            |                      |                               | 70.            | 51.            | 62.0           | .2731              | 3.5             | 541.     |              | 754.     | 694.                          |                | 0.00     |          |
| 13               |              |                              |                            |                      |                               | 71.            | 50.            | 63.0           | .2981              | 3.4             | 680.     |              | 707.     | 626.                          |                | 0.00     |          |
| 14               |              |                              |                            |                      |                               | 65.            | 44.            | 56.7           | .3082              | 1.5             | 440.     |              | 735.     | 709.                          |                | 0.00     |          |
| 15               |              |                              |                            |                      |                               | 63.            | 44.            | 55.0           | .3196              | 2.9             | 575.     |              | 688.     | 642.                          |                | 0.00     |          |
| 16               |              |                              |                            |                      |                               | 71.            | 44.            | 58.5           | .3241              | 1.9             | 555.     |              | 733.     | 670.                          |                | 0.00     |          |
| 17               |              |                              |                            |                      |                               | 75.            | 53.            | 64.2           | .3627              | 2.3             | 631.     |              | 760.     | 664.                          |                | 0.00     |          |
| 18               |              |                              |                            |                      |                               | 78.            | 52.            | 66.0           | .3905              | 2.0             | 558.     |              | 745.     | 713.                          |                | 0.00     |          |
| 19               |              |                              |                            |                      |                               | 78.            | 53.            | 67.4           | .4039              | 2.7             | 590.     |              | 740.     | 705.                          |                | 0.00     |          |
| 20               |              |                              |                            |                      |                               | 81.            | 57.            | 70.0           | .4644              | 2.7             | 565.     |              | 769.     | 735.                          |                | 0.00     |          |
| 21               |              |                              |                            |                      |                               | 69.            | 59.            | 64.5           | .5005              | 2.4             | 152.     |              | 646.     | 830.                          |                | .44      |          |
| 22               |              |                              |                            |                      |                               | 73.            | 53.            | 63.1           | .3499              | 2.7             | 728.     |              | 731.     | 600.                          |                | .01      |          |
| 23               |              |                              |                            |                      |                               | 75.            | 53.            | 64.1           | .3840              | 2.1             | 565.     |              | 722.     | 699.                          |                | 0.00     |          |
| 24               |              |                              |                            |                      |                               | 72.            | 50.            | 61.5           | .4039              | 2.5             | 440.     |              | 710.     | 739.                          |                | 0.00     |          |
| 25               |              |                              |                            |                      |                               | 67.            | 49.            | 59.0           | .4190              | 1.4             | 189.     |              | 715.     | 791.                          |                | .50      |          |
| 26               |              |                              |                            |                      |                               | 67.            | 46.            | 58.2           | .3191              | 4.5             | 552.     |              | 672.     | 670.                          |                | 0.00     |          |
| 27               |              |                              |                            |                      |                               | 70.            | 48.            | 60.3           | .3053              | 4.1             | 571.     |              | 674.     | 672.                          |                | 0.00     |          |
| 28               |              |                              |                            |                      |                               | 70.            | 44.            | 57.9           | .2424              | 1.4             | 594.     |              | 666.     | 645.                          |                | 0.00     |          |
| 29               |              |                              |                            |                      |                               | 79.            | 50.            | 65.2           | .4392              | 2.3             | 560.     |              | 769.     | 709.                          |                | 0.00     |          |
| 30               |              |                              |                            |                      |                               | 84.            | 64.            | 74.5           | .6045              | 2.9             | 706.     |              | 773.     | 684.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                            |                      |                               | 70.            | 48.            | 60.2           | 48.0               | 2.9             | 550.     |              | 702.     | 672.                          | TOTAL=         | 2.16     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) Q1=INCOMING SOLAR RADIATION Q4=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTF...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 7/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                      |                               | 76.            | 60.            | 69.1           | .5803              | 2.7             | 222.     |              | 749.     | 848.                          |                | .97      |          |
| 2                |              |                              |                      |                               | 68.            | 49.            | 60.5           | .3655              | 3.5             | 558.     |              | 697.     | 678.                          |                | 0.00     |          |
| 3                |              |                              |                      |                               | 66.            | 45.            | 54.6           | .2392              | 2.9             | 679.     |              | 633.     | 576.                          |                | 0.00     |          |
| 4                |              |                              |                      |                               | 75.            | 45.            | 60.1           | .3201              | 2.0             | 672.     |              | 674.     | 611.                          |                | 0.00     |          |
| 5                |              |                              |                      |                               | 79.            | 52.            | 67.4           | .3960              | 2.6             | 663.     |              | 643.     | 658.                          |                | 0.00     |          |
| 6                |              |                              |                      |                               | 72.            | 56.            | 63.7           | .4452              | 1.8             | 338.     |              | 716.     | 785.                          |                | .13      |          |
| 7                |              |                              |                      |                               | 74.            | 56.            | 65.0           | .4039              | 3.4             | 663.     |              | 726.     | 645.                          |                | 0.00     |          |
| 8                |              |                              |                      |                               | 76.            | 53.            | 64.8           | .3822              | 2.9             | 703.     |              | 702.     | 618.                          |                | 0.00     |          |
| 9                |              |                              |                      |                               | 80.            | 56.            | 67.9           | .4589              | 2.0             | 417.     |              | 726.     | 783.                          |                | 0.00     |          |
| 10               |              |                              |                      |                               | 75.            | 51.            | 65.6           | .3461              | 3.6             | 698.     |              | 646.     | 622.                          |                | 0.00     |          |
| 11               |              |                              |                      |                               | 66.            | 49.            | 58.2           | .2824              | 2.5             | 541.     |              | 655.     | 668.                          |                | 0.00     |          |
| 12               |              |                              |                      |                               | 68.            | 45.            | 56.5           | .2455              | 3.0             | 701.     |              | 641.     | 568.                          |                | 0.00     |          |
| 13               |              |                              |                      |                               | 73.            | 43.            | 58.3           | .3166              | 3.0             | 430.     |              | 569.     | 718.                          |                | .34      |          |
| 14               |              |                              |                      |                               | 67.            | 54.            | 58.5           | .4293              | 2.5             | 338.     |              | M        | 752.                          |                | .66      |          |
| 15               |              |                              |                      |                               | 69.            | 53.            | 60.3           | .4070              | 3.1             | 526.     |              | M        | 689.                          |                | .01      |          |
| 16               |              |                              |                      |                               | 73.            | 51.            | 63.5           | .4261              | 2.1             | 344.     |              | M        | 780.                          |                | .27      |          |
| 17               |              |                              |                      |                               | 76.            | 57.            | 64.2           | .4750              | 2.7             | 408.     |              | M        | 763.                          |                | .36      |          |
| 18               |              |                              |                      |                               | 66.            | 48.            | 58.7           | .3246              | 2.9             | 596.     |              | M        | 641.                          |                | .02      |          |
| 19               |              |                              |                      |                               | 67.            | 51.            | 59.2           | .3643              | 2.0             | 171.     |              | M        | 793.                          |                | .48      |          |
| 20               |              |                              |                      |                               | 65.            | 48.            | 58.0           | .3593              | 3.7             | 427.     |              | M        | 716.                          |                | .03      |          |
| 21               |              |                              |                      |                               | 72.            | 47.            | 59.0           | .3324              | 2.0             | 666.     |              | M        | 600.                          |                | 0.00     |          |
| 22               |              |                              |                      |                               | 76.            | 50.            | 64.8           | .3990              | 2.1             | 635.     |              | M        | 651.                          |                | 0.00     |          |
| 23               |              |                              |                      |                               | 80.            | 56.            | 68.2           | .4425              | 2.7             | 498.     |              | M        | 745.                          |                | 0.00     |          |
| 24               |              |                              |                      |                               | 77.            | 58.            | 67.0           | .4961              | 1.8             | 189.     |              | M        | 840.                          |                | .10      |          |
| 25               |              |                              |                      |                               | 74.            | 59.            | 65.8           | .4800              | 1.4             | 323.     |              | M        | 799.                          |                | 0.00     |          |
| 26               |              |                              |                      |                               | 78.            | 59.            | 70.2           | .5463              | 2.5             | 563.     |              | M        | 724.                          |                | 0.00     |          |
| 27               |              |                              |                      |                               | 74.            | 54.            | 66.1           | .4293              | 3.5             | 494.     |              | M        | 732.                          |                | .31      |          |
| 28               |              |                              |                      |                               | 73.            | 48.            | 61.6           | .3483              | 2.0             | 656.     |              | M        | 613.                          |                | 0.00     |          |
| 29               |              |                              |                      |                               | 68.            | 56.            | 64.0           | .4365              | 1.8             | 261.     |              | M        | 804.                          |                | .24      |          |
| 30               |              |                              |                      |                               | 73.            | 60.            | 65.9           | .4743              | 1.7             | 304.     |              | M        | 804.                          |                | .02      |          |
| 31               |              |                              |                      |                               | 76.            | 60.            | 66.7           | .5273              | 1.9             | 231.     |              | M        | 828.                          |                | .23      |          |
| MONTHLY AVERAGE= |              |                              |                      |                               |                |                |                |                    |                 | 73.      | 53.          | 63.0     | 52.9                          | 2.5            | 481.     |          |
|                  |              |                              |                      |                               |                |                |                |                    |                 | TOTAL=   |              |          | 711.                          | 4.17           |          |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 8/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>DEPTH<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN    |
|------------------|--------------|------------------------------|---------------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|-------------|
| 1                |              |                              |                           |                       |                      |                               | 75.            | 59.            | 67.2           | .4446              | 2.5             | 454.     |              | 753.     |                               |                | .05      |             |
| 2                |              |                              |                           |                       |                      |                               | 77.            | 64.            | 69.6           | .5594              | 2.0             | 350.     |              | 811.     |                               |                | .62      |             |
| 3                |              |                              |                           |                       |                      |                               | 67.            | 63.            | 65.5           | .5296              | 1.8             | 54.      |              | 845.     |                               |                | 2.33     |             |
| 4                |              |                              |                           |                       |                      |                               | 65.            | 54.            | 60.1           | .3746              | 2.4             | 275.     |              | 774.     |                               |                | 0.00     |             |
| 5                |              |                              |                           |                       |                      |                               | 67.            | 47.            | 59.3           | .3156              | 3.7             | 627.     |              | 604.     |                               |                | 0.00     |             |
| 6                |              |                              |                           |                       |                      |                               | 75.            | 60.            | 66.0           | .3787              | 3.4             | 482.     |              | 726.     |                               |                | 0.00     |             |
| 7                |              |                              |                           |                       |                      |                               | 71.            | 52.            | 62.6           | .3499              | 4.1             | 597.     |              | 640.     |                               |                | 0.00     |             |
| 8                |              |                              |                           |                       |                      |                               | 77.            | 54.            | 66.9           | .4039              | 2.7             | 578.     |              | 675.     |                               |                | 0.00     |             |
| 9                |              |                              |                           |                       |                      |                               | 79.            | 60.            | 71.5           | .4708              | 3.2             | 599.     |              | 688.     |                               |                | 0.00     |             |
| 10               |              |                              |                           |                       |                      |                               | 80.            | 59.            | 70.4           | .5257              | 2.5             | 445.     |              | 770.     |                               |                | 0.00     |             |
| 11               |              |                              |                           |                       |                      |                               | 74.            | 59.            | 67.7           | .5351              | 3.0             | 334.     |              | 801.     |                               |                | .35      |             |
| 12               |              |                              |                           |                       |                      |                               | 64.            | 48.            | 57.5           | .3067              | 3.3             | 584.     |              | 612.     |                               |                | 0.00     |             |
| 13               |              |                              |                           |                       |                      |                               | 76.            | 47.            | 62.8           | .3852              | 2.3             | 581.     |              | 644.     |                               |                | 0.00     |             |
| 14               |              |                              |                           |                       |                      |                               | 77.            | 54.            | 66.1           | .4609              | 2.0             | 531.     |              | 694.     |                               |                | 0.00     |             |
| 15               |              |                              |                           |                       |                      |                               | 61.            | 54.            | 57.1           | .3781              | 3.2             | 244.     |              | 761.     |                               |                | 0.00     |             |
| 16               |              |                              |                           |                       |                      |                               | 69.            | 46.            | 57.3           | .3092              | 2.5             | 637.     |              | 569.     |                               |                | 0.00     |             |
| 17               |              |                              |                           |                       |                      |                               | 75.            | 46.            | 63.3           | .3875              | 3.0             | 590.     |              | 633.     |                               |                | 0.00     |             |
| 18               |              |                              |                           |                       |                      |                               | 79.            | 49.            | 65.9           | .4479              | 1.5             | 538.     |              | 682.     |                               |                | 0.00     |             |
| 19               |              |                              |                           |                       |                      |                               | 82.            | 56.            | 68.1           | .4493              | 2.0             | 580.     |              | 664.     |                               |                | 0.00     |             |
| 20               |              |                              |                           |                       |                      |                               | 74.            | 57.            | 66.3           | .4880              | 2.9             | 346.     |              | 781.     |                               |                | .93      |             |
| 21               |              |                              |                           |                       |                      |                               | 69.            | 56.            | 62.5           | .4372              | 2.6             | 295.     |              | 776.     |                               |                | .22      |             |
| 22               |              |                              |                           |                       |                      |                               | 72.            | 53.            | 61.1           | .4209              | 2.2             | 376.     |              | 736.     |                               |                | .25      |             |
| 23               |              |                              |                           |                       |                      |                               | 60.            | 44.            | 51.0           | .3014              | 4.4             | 173.     |              | 740.     |                               |                | 1.16     |             |
| 24               |              |                              |                           |                       |                      |                               | 57.            | 43.            | 49.4           | .2323              | 4.1             | 565.     |              | 559.     |                               |                | 0.00     |             |
| 25               |              |                              |                           |                       |                      |                               | 61.            | 38.            | 51.2           | .2632              | 2.1             | 465.     |              | 629.     |                               |                | 0.00     |             |
| 26               |              |                              |                           |                       |                      |                               | 68.            | 48.            | 58.9           | .3735              | 1.7             | 404.     |              | 705.     |                               |                | 0.00     |             |
| 27               |              |                              |                           |                       |                      |                               | 61.            | 51.            | 55.0           | .3293              | 2.0             | 192.     |              | 758.     |                               |                | .35      |             |
| 28               |              |                              |                           |                       |                      |                               | 62.            | 53.            | 58.2           | .4293              | 2.9             | 92.      |              | 795.     |                               |                | 3.43     |             |
| 29               |              |                              |                           |                       |                      |                               | 70.            | 54.            | 61.6           | .4365              | 3.8             | 394.     |              | 723.     |                               |                | .03      |             |
| 30               |              |                              |                           |                       |                      |                               | 70.            | 48.            | 59.3           | .3954              | 2.9             | 259.     |              | 764.     |                               |                | .08      |             |
| 31               |              |                              |                           |                       |                      |                               | 62.            | 42.            | 51.7           | .2444              | 3.2             | 583.     |              | 541.     |                               |                | 0.00     |             |
| MONTHLY AVERAGE= |              |                              |                           |                       |                      |                               |                |                |                |                    |                 | 70.      | 61.7         | 52.6     | 2.8                           | 427.           | 705.     | TOTAL= 9.80 |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VERMONT-- 9/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COUPSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN.<br>IN | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                  |                       |                            |                               | 65.            | 42.            | 52.9           | .2607              | 2.8             | 510.     |        |          | 594.                          |                | 0.00     |          |
| 2                |              |                              |                  |                       |                            |                               | 69.            | 41.            | 56.0           | .3211              | 2.0             | 531.     |        |          | 595.                          |                | 0.00     |          |
| 3                |              |                              |                  |                       |                            |                               | 75.            | 52.            | 64.0           | .4630              | 2.0             | 317.     |        |          | 767.                          |                | 0.00     |          |
| 4                |              |                              |                  |                       |                            |                               | 76.            | 58.            | 67.8           | .5351              | 1.9             | 331.     |        |          | 784.                          |                | 0.00     |          |
| 5                |              |                              |                  |                       |                            |                               | 76.            | 64.            | 69.8           | .5743              | 2.1             | 248.     |        |          | 830.                          |                | 0.00     |          |
| 6                |              |                              |                  |                       |                            |                               | 66.            | 57.            | 62.7           | .4829              | 2.4             | 120.     |        |          | 819.                          |                | 0.00     |          |
| 7                |              |                              |                  |                       |                            |                               | 76.            | 56.            | 64.3           | .4786              | 2.2             | 366.     |        |          | 740.                          |                | 0.00     |          |
| 8                |              |                              |                  |                       |                            |                               | 76.            | 61.            | 67.4           | .4983              | 2.2             | 388.     |        |          | 744.                          |                | 0.00     |          |
| 9                |              |                              |                  |                       |                            |                               | 70.            | 46.            | 61.5           | .3972              | 2.5             | 387.     |        |          | 707.                          |                | 0.00     |          |
| 10               |              |                              |                  |                       |                            |                               | 68.            | 44.            | 56.3           | .3329              | 1.2             | 475.     |        |          | 617.                          |                | 0.00     |          |
| 11               |              |                              |                  |                       |                            |                               | 72.            | 51.            | 61.2           | .4405              | 1.1             | 242.     |        |          | 774.                          |                | 0.00     |          |
| 12               |              |                              |                  |                       |                            |                               | 67.            | 63.            | 65.0           | .5312              | 1.2             | 56.      |        |          | 841.                          |                | .74      |          |
| 13               |              |                              |                  |                       |                            |                               | 65.            | 61.            | 63.6           | .5119              | 1.3             | 98.      |        |          | 827.                          |                | .06      |          |
| 14               |              |                              |                  |                       |                            |                               | 64.            | 60.            | 61.6           | .4686              | .8              | 96.      |        |          | 815.                          |                | .27      |          |
| 15               |              |                              |                  |                       |                            |                               | 73.            | 60.            | 64.2           | .4873              | 1.3             | 232.     |        |          | 794.                          |                | 0.00     |          |
| 16               |              |                              |                  |                       |                            |                               | 71.            | 52.            | 62.2           | .3822              | 2.6             | 460.     |        |          | 643.                          |                | 0.00     |          |
| 17               |              |                              |                  |                       |                            |                               | 61.            | 49.            | 56.9           | .3852              | .9              | 105.     |        |          | 783.                          |                | .02      |          |
| 18               |              |                              |                  |                       |                            |                               | 60.            | 47.            | 55.0           | .3499              | 2.2             | 118.     |        |          | 769.                          |                | .15      |          |
| 19               |              |                              |                  |                       |                            |                               | 61.            | 43.            | 53.1           | .2911              | 1.9             | 371.     |        |          | 648.                          |                | 0.00     |          |
| 20               |              |                              |                  |                       |                            |                               | 62.            | 49.            | 55.0           | .3424              | 3.6             | 80.      |        |          | 776.                          |                | .07      |          |
| 21               |              |                              |                  |                       |                            |                               | 63.            | 45.            | 54.3           | .3334              | 3.6             | 227.     |        |          | 730.                          |                | .32      |          |
| 22               |              |                              |                  |                       |                            |                               | 62.            | 41.            | 50.1           | .2549              | 1.7             | 455.     |        |          | 559.                          |                | 0.00     |          |
| 23               |              |                              |                  |                       |                            |                               | 62.            | 41.            | 53.2           | .2753              | 2.4             | 361.     |        |          | 645.                          |                | 0.00     |          |
| 24               |              |                              |                  |                       |                            |                               | 52.            | 33.            | 45.1           | .2017              | 4.9             | 383.     |        |          | 582.                          |                | .02      |          |
| 25               |              |                              |                  |                       |                            |                               | 56.            | 32.            | 43.5           | .1884              | 2.7             | 397.     |        |          | 560.                          |                | 0.00     |          |
| 26               |              |                              |                  |                       |                            |                               | 60.            | 40.            | 49.0           | .2116              | 2.5             | 359.     |        |          | 614.                          |                | 0.00     |          |
| 27               |              |                              |                  |                       |                            |                               | 59.            | 38.            | 49.4           | .2392              | 1.7             | 326.     |        |          | 638.                          |                | 0.00     |          |
| 28               |              |                              |                  |                       |                            |                               | 57.            | 49.            | 52.7           | .3156              | 2.0             | 106.     |        |          | 756.                          |                | 0.00     |          |
| 29               |              |                              |                  |                       |                            |                               | 67.            | 55.            | 62.0           | .4452              | 2.6             | 73.      |        |          | 819.                          |                | .10      |          |
| 30               |              |                              |                  |                       |                            |                               | 64.            | 46.            | 54.3           | .2731              | 2.4             | 392.     |        |          | 604.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                            |                               |                |                |                |                    |                 |          |        |          |                               | 712.           | TOTAL=   | 1.75     |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QK=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 10/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>SUR.<br>DEN. | SNOW<br>COUPSE<br>WE<br>IN | SNOW<br>DEPTH<br>IN | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | OI<br>LY | ALBEDO<br>LY | QA<br>LY | BAKER<br>QA<br>LY | ANDERSON<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------|----------------------------|---------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------|----------------------|----------------|----------|----------|
| 1                |              |                              |                      |                            |                     |                               | 67.            | 43.            | 54.8           | .2727              | 2.3             | 369.     | 622.         | 623.     | 623.              | 623.                 |                | 0.00     |          |
| 2                |              |                              |                      |                            |                     |                               | 75.            | 48.            | 61.8           | .3960              | 3.0             | 269.     | 738.         | 737.     | 737.              | 737.                 |                | .20      |          |
| 3                |              |                              |                      |                            |                     |                               | 61.            | 41.            | 50.2           | .2467              | 1.7             | 391.     | 572.         | 571.     | 571.              | 571.                 |                | 0.00     |          |
| 4                |              |                              |                      |                            |                     |                               | 53.            | 45.            | 49.2           | .2641              | 3.7             | 173.     | 765.         | 710.     | 710.              | 710.                 |                | 0.00     |          |
| 5                |              |                              |                      |                            |                     |                               | 62.            | 47.            | 54.9           | .3267              | 1.6             | 162.     | 686.         | 748.     | 748.              | 748.                 |                | 0.00     |          |
| 6                |              |                              |                      |                            |                     |                               | 61.            | 45.            | 51.1           | .3058              | 1.8             | 196.     | 671.         | 709.     | 709.              | 709.                 |                | .19      |          |
| 7                |              |                              |                      |                            |                     |                               | 49.            | 36.            | 41.3           | .2219              | 3.1             | 61.      | 620.         | 696.     | 696.              | 696.                 |                | .05      |          |
| 8                |              |                              |                      |                            |                     |                               | 47.            | 33.            | 39.0           | .1723              | 3.0             | 328.     | 563.         | 549.     | 549.              | 549.                 |                | .06      |          |
| 9                |              |                              |                      |                            |                     |                               | 47.            | 35.            | 42.2           | .2346              | 1.2             | 44.      | 639.         | 704.     | 704.              | 704.                 |                | .10      |          |
| 10               |              |                              |                      |                            |                     |                               | 52.            | 46.            | 50.7           | .3267              | 2.9             | 23.      | 689.         | 755.     | 755.              | 755.                 |                | 1.35     |          |
| 11               |              |                              |                      |                            |                     |                               | 53.            | 43.            | 47.9           | .2400              | 3.5             | 207.     | 633.         | 678.     | 678.              | 678.                 |                | .05      |          |
| 12               |              |                              |                      |                            |                     |                               | 47.            | 32.            | 41.5           | .1855              | 3.1             | 166.     | 591.         | 663.     | 663.              | 663.                 |                | .09      |          |
| 13               |              |                              |                      |                            |                     |                               | 54.            | 27.            | 40.9           | .1884              | 1.7             | 270.     | 607.         | 591.     | 591.              | 591.                 |                | .02      |          |
| 14               |              |                              |                      |                            |                     |                               | 63.            | 48.            | 54.1           | .3318              | 2.4             | 136.     | 688.         | 747.     | 747.              | 747.                 |                | 0.00     |          |
| 15               |              |                              |                      |                            |                     |                               | 68.            | 48.            | 54.9           | .3176              | 2.1             | 318.     | 642.         | 617.     | 617.              | 617.                 |                | 0.00     |          |
| 16               |              |                              |                      |                            |                     |                               | 64.            | 45.            | 54.2           | .3024              | 1.2             | 207.     | 658.         | 705.     | 705.              | 705.                 |                | 0.00     |          |
| 17               |              |                              |                      |                            |                     |                               | 53.            | 37.            | 46.9           | .2440              | 1.1             | 146.     | 630.         | 698.     | 698.              | 698.                 |                | 0.00     |          |
| 18               |              |                              |                      |                            |                     |                               | 56.            | 36.            | 44.1           | .2044              | 1.5             | 303.     | 571.         | 560.     | 560.              | 560.                 |                | 0.00     |          |
| 19               |              |                              |                      |                            |                     |                               | 63.            | 40.            | 50.9           | .2833              | 1.6             | 241.     | 660.         | 653.     | 653.              | 653.                 |                | 0.00     |          |
| 20               |              |                              |                      |                            |                     |                               | 54.            | 40.            | 45.3           | .2565              | 1.8             | 203.     | 643.         | 650.     | 650.              | 650.                 |                | 0.00     |          |
| 21               |              |                              |                      |                            |                     |                               | 64.            | 41.            | 50.5           | .2856              | 1.3             | 297.     | 624.         | 589.     | 589.              | 589.                 |                | 0.00     |          |
| 22               |              |                              |                      |                            |                     |                               | 63.            | 38.            | 51.2           | .2658              | 1.5             | 267.     | 654.         | 619.     | 619.              | 619.                 |                | 0.00     |          |
| 23               |              |                              |                      |                            |                     |                               | 59.            | 46.            | 52.2           | .2838              | 2.0             | 157.     | 669.         | 715.     | 715.              | 715.                 |                | 0.00     |          |
| 24               |              |                              |                      |                            |                     |                               | 53.            | 36.            | 45.8           | .1890              | 2.0             | 225.     | 610.         | 623.     | 623.              | 623.                 |                | .03      |          |
| 25               |              |                              |                      |                            |                     |                               | 51.            | 41.            | 47.7           | .2920              | 1.8             | 52.      | 689.         | 732.     | 732.              | 732.                 |                | .43      |          |
| 26               |              |                              |                      |                            |                     |                               | 58.            | 49.            | 54.0           | .3582              | 1.6             | 103.     | 720.         | 752.     | 752.              | 752.                 |                | .02      |          |
| 27               |              |                              |                      |                            |                     |                               | 60.            | 50.            | 53.7           | .3241              | 1.7             | 167.     | 679.         | 710.     | 710.              | 710.                 |                | 0.00     |          |
| 28               |              |                              |                      |                            |                     |                               | 71.            | 48.            | 58.4           | .3510              | 2.7             | 248.     | 664.         | 657.     | 657.              | 657.                 |                | 0.00     |          |
| 29               |              |                              |                      |                            |                     |                               | 64.            | 40.            | 51.2           | .2392              | 2.2             | 280.     | 590.         | 570.     | 570.              | 570.                 |                | 0.00     |          |
| 30               |              |                              |                      |                            |                     |                               | 65.            | 35.            | 48.5           | .2010              | 2.0             | 203.     | 604.         | 640.     | 640.              | 640.                 |                | 0.00     |          |
| 31               |              |                              |                      |                            |                     |                               | 46.            | 35.            | 39.3           | .1859              | 3.3             | 57.      | 610.         | 682.     | 682.              | 682.                 |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                      |                            |                     |                               | 58.            | 41.            | 49.3           | 42.0               | 2.1             | 202.     | 645.         | 666.     | 666.              | 666.                 | TOTAL=         | 2.59     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE(AIR) OI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 11/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COURSE<br>WE<br>IN | SNOW<br>SUR.<br>DEN. | PILLLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALBEDO<br>LY | Q4<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------------|----------------------|--------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                            |                      |                                | 58.            | 36.            | 48.8           | .2256              | 2.6             | 250.     |              | 711.     | 581.                          |                | 0.00     |          |
| 2                |              |                              |                            |                      |                                | 56.            | 36.            | 44.5           | .2444              | 1.8             | 35.      |              | 645.     | 716.                          |                | .26      |          |
| 3                |              |                              |                            |                      |                                | 48.            | 33.            | 43.6           | .2216              | 1.3             | 63.      |              | 650.     | 703.                          |                | 0.00     |          |
| 4                |              |                              |                            |                      |                                | 42.            | 27.            | 34.8           | .1540              | 2.3             | 177.     |              | 568.     | 580.                          |                | .12      |          |
| 5                |              |                              |                            |                      |                                | 35.            | 26.            | 31.1           | .1258              | 2.8             | 293.     |              | 535.     | 428.                          |                | .03      |          |
| 6                |              |                              |                            |                      |                                | 47.            | 31.            | 39.8           | .1509              | 4.5             | 214.     |              | 552.     | 557.                          |                | 0.00     |          |
| 7                |              |                              |                            |                      |                                | 46.            | 24.            | 32.2           | .1438              | 4.0             | 74.      |              | 573.     | 635.                          |                | .44      |          |
| 8                |              |                              |                            |                      |                                | 24.            | 14.            | 19.5           | .0846              | 4.2             | 126.     |              | 504.     | 540.                          |                | .07      |          |
| 9                |              |                              |                            |                      |                                | 23.            | 9.             | 15.9           | .0648              | 2.4             | 266.     |              | 436.     | 360.                          |                | 0.00     |          |
| 10               |              |                              |                            |                      |                                | 30.            | 10.            | 22.1           | .0952              | 1.2             | 151.     |              | 538.     | 528.                          |                | .09      |          |
| 11               |              |                              |                            |                      |                                | 27.            | 21.            | 24.3           | .1142              | 3.8             | 35.      |              | 577.     | 607.                          |                | .11      |          |
| 12               |              |                              |                            |                      |                                | 30.            | 18.            | 25.5           | .1162              | 1.9             | 99.      |              | 567.     | 584.                          |                | .05      |          |
| 13               |              |                              |                            |                      |                                | 28.            | 13.            | 22.3           | .0930              | 3.3             | 129.     |              | 541.     | 544.                          |                | 0.00     |          |
| 14               |              |                              |                            |                      |                                | 31.            | 8.             | 18.2           | .0802              | .9              | 246.     |              | 489.     | 371.                          |                | 0.00     |          |
| 15               |              |                              |                            |                      |                                | 34.            | 15.            | 25.4           | .0992              | .9              | 169.     |              | 551.     | 512.                          |                | 0.00     |          |
| 16               |              |                              |                            |                      |                                | 38.            | 20.            | 29.0           | .0748              | 3.1             | 229.     |              | 485.     | 432.                          |                | 0.00     |          |
| 17               |              |                              |                            |                      |                                | 37.            | 19.            | 30.0           | .1036              | 1.0             | 113.     |              | 572.     | 590.                          |                | 0.00     |          |
| 18               |              |                              |                            |                      |                                | 39.            | 33.            | 36.3           | .1506              | 1.2             | 35.      |              | 647.     | 668.                          |                | 0.00     |          |
| 19               |              |                              |                            |                      |                                | 47.            | 33.            | 40.7           | .2067              | 1.9             | 62.      |              | 662.     | 681.                          |                | .17      |          |
| 20               |              |                              |                            |                      |                                | 39.            | 24.            | 33.0           | .1401              | 2.2             | 141.     |              | 556.     | 572.                          |                | .03      |          |
| 21               |              |                              |                            |                      |                                | 32.            | 22.            | 28.8           | .1333              | 1.0             | 56.      |              | 591.     | 620.                          |                | .05      |          |
| 22               |              |                              |                            |                      |                                | 32.            | 20.            | 25.3           | .1043              | 5.1             | 48.      |              | 567.     | 606.                          |                | 0.00     |          |
| 23               |              |                              |                            |                      |                                | 21.            | 10.            | 15.7           | .0648              | 3.6             | 181.     |              | 427.     | 426.                          |                | 0.00     |          |
| 24               |              |                              |                            |                      |                                | 22.            | 7.             | 16.5           | .0666              | 1.2             | 102.     |              | 512.     | 525.                          |                | 0.00     |          |
| 25               |              |                              |                            |                      |                                | 27.            | 21.            | 23.3           | .1100              | 3.4             | 2.       |              | 581.     | 606.                          |                | 1.45     |          |
| 26               |              |                              |                            |                      |                                | 24.            | 22.            | 22.8           | .1068              | 5.9             | 71.      |              | 571.     | 580.                          |                | .05      |          |
| 27               |              |                              |                            |                      |                                | 28.            | 16.            | 23.9           | .1128              | .9              | 69.      |              | 574.     | 586.                          |                | .05      |          |
| 28               |              |                              |                            |                      |                                | 34.            | 27.            | 30.2           | .1514              | 2.3             | 21.      |              | 619.     | 639.                          |                | .02      |          |
| 29               |              |                              |                            |                      |                                | 30.            | 27.            | 28.0           | .1421              | 1.2             | 23.      |              | 604.     | 627.                          |                | .53      |          |
| 30               |              |                              |                            |                      |                                | 30.            | 17.            | 25.3           | .1215              | 4.7             | 28.      |              | 593.     | 612.                          |                | .63      |          |
| MONTHLY AVERAGE= |              |                              |                            |                      |                                | 35.            | 21.            | 28.6           | .23.4              | 2.6             | 117.     |              | 567.     | 567.                          | TOTAL=         | 4.15     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 12/71

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>MPH<br>U | Q1<br>LY | ALBEDO<br>LY | Q4<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                | 1200         | 17.7                         |                  |                       | .11                  | 3.1                           | 16.            | 3.             | 12.2           | .0662              | 5.7             | 120.     | M            | 472.     | 473.                          | M              | .03      |          |
| 2                | 0900         | 17.3                         |                  |                       | .11                  | 3.0                           | 16.            | 6.             | 10.7           | .0614              | 4.9             | 192.     | M            | 453.     | 341.                          | M              | 0.00     |          |
| 3                | 0900         | 17.8                         |                  |                       | .11                  | 3.3                           | 26.            | 11.            | 19.5           | .0954              | 2.9             | 40.      | M            | 580.     | 578.                          | M              | .20      |          |
| 4                |              |                              |                  |                       |                      | 3.3                           | 19.            | 0.             | 11.3           | .0597              | 3.9             | 99.      | M            | 429.     | 491.                          | M              | 0.00     |          |
| 5                |              |                              |                  |                       |                      | 3.3                           | 18.            | -1.            | 6.3            | .0504              | .7              | 210.     | M            | 451.     | 322.                          | M              | 0.00     |          |
| 6                | 0900         | 17.6                         |                  |                       | .11                  | 3.7                           | 30.            | 6.             | 20.2           | .0967              | 3.8             | 35.      | M            | 574.     | 583.                          | M              | .26      |          |
| 7                | 0900         | 18.7                         | 3.6              | 18.7                  | .13                  | 3.8                           | 34.            | 24.            | 32.0           | .1677              | 1.8             | 32.      | M            | 632.     | 644.                          | M              | .13      |          |
| 8                | 0900         | 18.0                         | 3.8              | 18.0                  | .14                  | 3.9                           | 30.            | 17.            | 25.2           | .1232              | 1.3             | 160.     | M            | 593.     | 457.                          | M              | .01      |          |
| 9                | 0900         | 17.7                         | 3.8              | 17.6                  | .14                  | 4.2                           | 33.            | 28.            | 30.8           | .1638              | 2.3             | 27.      | M            | 657.     | 640.                          | M              | .34      |          |
| 10               | 0900         | 18.6                         |                  |                       | .18                  | 4.3                           | 36.            | 33.            | 34.9           | .1906              | 2.6             | 56.      | M            | 675.     | 646.                          | M              | .06      |          |
| 11               |              |                              |                  |                       |                      | 4.0                           | 44.            | 36.            | 39.4           | .1540              | 5.2             | 101.     | M            | 600.     | 622.                          | M              | .09      |          |
| 12               |              |                              |                  |                       |                      | 3.9                           | 37.            | 22.            | 32.0           | .1132              | 2.3             | 83.      | M            | 563.     | 605.                          | M              | 0.00     |          |
| 13               | 0900         | 13.5                         |                  |                       | .23                  | 3.9                           | 36.            | 21.            | 29.1           | .1187              | 5.0             | 70.      | M            | 577.     | 603.                          | M              | .06      |          |
| 14               | 0900         | 14.0                         | 3.6              | 14.5                  | .27                  | 3.7                           | 20.            | 12.            | 18.3           | .0719              | 2.7             | 99.      | M            | 483.     | 518.                          | M              | .01      |          |
| 15               | 0900         | 13.8                         |                  |                       | .26                  | 4.2                           | 35.            | 16.            | 23.7           | .1164              | 2.6             | 23.      | M            | 590.     | 604.                          | M              | .33      |          |
| 16               | 0900         | 13.2                         |                  |                       | .34                  | 4.1                           | 43.            | 28.            | 36.9           | .1638              | 4.3             | 84.      | M            | 653.     | 630.                          | M              | .19      |          |
| 17               | 0900         | 13.5                         | 3.8              | 13.1                  | .30                  | 3.9                           | 27.            | 14.            | 20.0           | .0832              | 4.1             | 148.     | M            | 498.     | 449.                          | M              | .03      |          |
| 18               |              |                              |                  |                       |                      | 4.1                           | 17.            | 0.             | 8.9            | .0545              | 5.3             | 101.     | M            | 466.     | 473.                          | M              | .07      |          |
| 19               |              |                              |                  |                       |                      | 3.8                           | 7.             | -10.           | .9             | .0335              | 1.3             | 141.     | M            | 435.     | 380.                          | M              | .04      |          |
| 20               | 0900         | 15.1                         | 4.0              | 15.0                  | .10                  | 4.0                           | 24.            | 8.             | 18.2           | .0906              | 1.3             | 53.      | M            | 569.     | 563.                          | M              | .06      |          |
| 21               | 0900         | 15.1                         | 4.0              | 15.0                  | .11                  | 4.1                           | 33.            | 24.            | 29.9           | .1396              | 1.8             | 34.      | M            | 620.     | 632.                          | M              | .05      |          |
| 22               | 0900         | 13.8                         | 4.0              | 14.1                  | .24                  | 4.0                           | 23.            | -2.            | 3.9            | .0327              | 10.1            | 146.     | M            | 394.     | 384.                          | M              | .06      |          |
| 23               | 0900         | 13.2                         | 3.8              | 13.3                  | .30                  | 2.7                           | 19.            | -10.           | 4.9            | .0271              | 2.8             | 129.     | M            | 440.     | 417.                          | M              | 0.00     |          |
| 24               |              |                              |                  |                       |                      | 4.0                           | 39.            | 19.            | 30.3           | .1389              | 3.9             | 10.      | M            | 636.     | 641.                          | M              | .53      |          |
| 25               |              |                              |                  |                       |                      | 3.5                           | 26.            | -3.            | 5.4            | .0432              | 6.1             | 133.     | M            | 496.     | 416.                          | M              | .14      |          |
| 26               |              |                              |                  |                       |                      | 4.1                           | 34.            | 8.             | 22.0           | .0994              | 3.1             | 23.      | M            | 591.     | 596.                          | M              | .04      |          |
| 27               | 1300         | 14.0                         | 4.1              | 14.0                  | .25                  | 3.7                           | 24.            | 1.             | 12.0           | .0616              | 2.7             | 91.      | M            | 525.     | 502.                          | M              | .10      |          |
| 28               |              |                              |                  |                       |                      | 5.2                           | 36.            | 12.            | 23.4           | .1023              | 5.1             | 140.     | M            | 524.     | 488.                          | M              | .19      |          |
| 29               |              |                              |                  |                       |                      | 4.5                           | 28.            | 8.             | 19.9           | .0863              | 3.7             | 88.      | M            | 547.     | 543.                          | M              | .03      |          |
| 30               |              |                              |                  |                       |                      | 5.1                           | 15.            | 3.             | 8.0            | .0506              | 1.2             | 23.      | M            | 492.     | 529.                          | M              | .52      |          |
| 31               | 1430         | 21.6                         | 5.1              | 21.1                  | .08                  | 5.3                           | 14.            | -12.           | 2.5            | .0374              | 3.5             | 138.     | M            | 465.     | 403.                          | M              | .10      |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               | 27.            | 10.            | 19.1           | 16.3               | 3.5             | 91.      | M            | 538.     | 522.                          | TOTAL=         | 3.67     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW Q4=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 1/72

| DAY              | OBS. TIME | DEPTH SNOW STAKE IN | SNOW WE IN | COURSE DEPTH IN | SNOW SUR. DEN. | PILLOW WE AT 2400 IN | MAX TA F | MIN TA F | AVE TA F | AVE EA IN.HG | AVE U MPH | Q1 LY | ALBEDO LY | Q4 LY | ANDERSON BAKER |      | AVE TS F | PX IN | PO IN |        |      |
|------------------|-----------|---------------------|------------|-----------------|----------------|----------------------|----------|----------|----------|--------------|-----------|-------|-----------|-------|----------------|------|----------|-------|-------|--------|------|
|                  |           |                     |            |                 |                |                      |          |          |          |              |           |       |           |       | QA LY          | LY   |          |       |       |        |      |
| 1                |           |                     |            |                 |                | 5.3                  | 15.      | -12.     | 3.6      | .0423        | 2.1       | 101.  | .84       | 458.  | 457.           | M    | 0.00     |       |       |        |      |
| 2                |           |                     |            |                 |                | 5.5                  | 33.      | 10.      | 23.2     | .1093        | 2.3       | 26.   | .90       | 583.  | 602.           | 22.0 | .31      |       |       |        |      |
| 3                | 0900      | 22.7                | 5.6        | 22.0            | .12            | 5.5                  | 30.      | 15.      | 26.4     | .1003        | 4.7       | 120.  | .87       | 537.  | 541.           | 17.9 | .07      |       |       |        |      |
| 4                | 0900      | 22.1                | 5.5        | 21.7            | .16            | 5.4                  | 29.      | 11.      | 22.2     | .1025        | 1.5       | 53.   | .89       | 573.  | 585.           | 17.2 | .08      |       |       |        |      |
| 5                | 0900      | 23.6                | 5.5        | 21.8            | .13            | 5.4                  | 23.      | -14.     | 5.4      | .0433        | 5.3       | 139.  | .86       | 430.  | 422.           | M    | .10      |       |       |        |      |
| 6                | 1030      | 23.5                | 6.0        | 22.5            | .13            | 5.4                  | 7.       | -14.     | -3.5     | .0250        | 1.0       | 181.  | .70       | 395.  | 321.           | M    | 0.00     |       |       |        |      |
| 7                |           |                     |            |                 |                | 5.6                  | 22.      | 3.       | 12.2     | .0611        | 1.8       | 115.  | .84       | 492.  | 486.           | M    | .14      |       |       |        |      |
| 8                |           |                     |            |                 |                | 5.6                  | 18.      | -11.     | -6       | .0295        | 5.6       | 179.  | .82       | 401.  | 341.           | M    | .07      |       |       |        |      |
| 9                | 1400      | 22.1                | 6.1        | 22.5            | .14            | 5.7                  | 37.      | 2.       | 21.3     | .0782        | 5.0       | 53.   | .87       | 565.  | 582.           | 18.7 | 0.00     |       |       |        |      |
| 10               | 0900      | 21.6                | 5.7        | 22.0            | .15            | 5.8                  | 41.      | 21.      | 30.5     | .1144        | 2.3       | 179.  | .80       | 526.  | 483.           | 13.9 | 0.00     |       |       |        |      |
| 11               | 1045      | 21.3                | 5.9        | 21.4            | .18            | 5.9                  | 40.      | 26.      | 33.6     | .1416        | 2.0       | 73.   | .75       | 607.  | 633.           | 26.5 | .09      |       |       |        |      |
| 12               | 0900      | 22.0                | 5.7        | 21.6            | .16            | 6.1                  | 33.      | 22.      | 27.7     | .1191        | 2.6       | 122.  | .86       | 573.  | 558.           | 21.0 | .09      |       |       |        |      |
| 13               | 0900      | 21.0                | 5.6        | 20.7            | .19            | 5.8                  | 45.      | 30.      | 36.3     | .1773        | 6.2       | 33.   | .82       | 641.  | 668.           | 29.6 | .09      |       |       |        |      |
| 14               | 0900      | 18.6                | 5.4        | 19.2            | .23            | 5.6                  | 29.      | 0.       | 11.2     | .0542        | 4.3       | 193.  | .74       | 438.  | 386.           | M    | .07      |       |       |        |      |
| 15               |           |                     |            |                 |                | 5.3                  | 16.      | -3.      | 6.8      | .0429        | 3.9       | 78.   | .86       | 468.  | 501.           | 2.3  | .03      |       |       |        |      |
| 16               |           |                     |            |                 |                | 5.3                  | -5.      | -25.     | -11.0    | .0158        | 5.7       | 179.  | .75       | 321.  | 325.           | M    | 0.00     |       |       |        |      |
| 17               |           |                     |            |                 |                | 5.3                  | 15.      | -24.     | -7       | .0364        | 1.6       | 72.   | .85       | 480.  | 474.           | M    | .14      |       |       |        |      |
| 18               | 0900      | 20.7                | 5.8        | 20.8            | .07            | 5.5                  | 34.      | 8.       | 22.1     | .0892        | 2.0       | 115.  | .82       | 562.  | 546.           | M    | 0.00     |       |       |        |      |
| 19               | 0900      | 18.8                | 6.0        | 18.9            | .22            | 5.7                  | 43.      | 19.      | 31.5     | .1267        | 4.9       | 120.  | .73       | 569.  | 589.           | 27.0 | .10      |       |       |        |      |
| 20               | 0900      | 18.7                | 5.7        | 18.7            | .29            | 5.7                  | 25.      | 13.      | 18.7     | .0795        | 3.2       | 104.  | .78       | 525.  | 542.           | 17.7 | .25      |       |       |        |      |
| 21               | 1030      | 21.3                | 6.0        | 21.3            | .13            | 5.7                  | 27.      | -2.      | 9.7      | .0537        | 3.3       | 205.  | .82       | 453.  | 386.           | M    | .07      |       |       |        |      |
| 22               |           |                     |            |                 |                | 5.8                  | 26.      | 8.       | 19.7     | .0903        | 4.3       | 63.   | .89       | 553.  | 573.           | 17.0 | 0.00     |       |       |        |      |
| 23               |           |                     |            |                 |                | 5.8                  | 41.      | 26.      | 32.8     | .1602        | 3.3       | 124.  | .78       | 626.  | 598.           | 31.2 | 0.00     |       |       |        |      |
| 24               | 0900      | 20.6                | 5.9        | 21.0            | .17            | 5.7                  | 30.      | 13.      | 23.9     | .1045        | 2.7       | 123.  | .85       | 547.  | 556.           | 19.9 | .07      |       |       |        |      |
| 25               | 0900      | 20.2                | 6.0        | 20.4            | .24            | 5.8                  | 36.      | 4.       | 24.5     | .0892        | 8.0       | 104.  | .73       | 568.  | 574.           | 23.8 | .32      |       |       |        |      |
| 26               | 0900      | 20.0                | 6.0        | 20.3            | .25            | 5.3                  | 2.       | -10.     | -2.5     | .0207        | 5.6       | 204.  | .74       | 367.  | 355.           | M    | .02      |       |       |        |      |
| 27               | 0900      | 20.1                |            |                 | .27            | 5.4                  | 5.       | -7.      | -1.2     | .0286        | 3.7       | 202.  | .75       | 413.  | 366.           | M    | .05      |       |       |        |      |
| 28               | 0900      | 20.3                | 5.9        | 20.7            | .24            | 5.8                  | 16.      | 4.       | 10.6     | .0601        | 1.6       | 111.  | .89       | 516.  | 507.           | 7.7  | .12      |       |       |        |      |
| 29               |           |                     |            |                 |                | 6.1                  | 18.      | -4.      | 9.0      | .0538        | 2.3       | 179.  | .90       | 476.  | 441.           | M    | .05      |       |       |        |      |
| 30               |           |                     |            |                 |                | 6.4                  | 26.      | -5.      | 11.3     | .0543        | 2.4       | 160.  | .90       | 485.  | 472.           | M    | .02      |       |       |        |      |
| 31               | 0900      | 24.5                | 6.1        | 24.6            | .05            | 6.6                  | 13.      | -3.      | 5.6      | .0413        | 3.3       | 238.  | .84       | 406.  | 361.           | M    | .04      |       |       |        |      |
| MONTHLY AVERAGE= |           |                     |            |                 |                |                      |          |          |          |              |           | 3.    | 14.9      | 11.5  | 3.5            | 127. | .82      | 502.  | 491   | TOTAL= | 2.41 |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 2/72

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALFREDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|--------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|---------------|----------|-------------------------------|----------------|----------|----------|
| 1                | 0900         | 23.3                         | 6.3              | 23.2                  | .08          | 6.8                           | 17.            | -4.            | 6.7            | .0471              | 1.8             | 143.     | .80           | 459.     | 474.                          | M              | 0.00     |          |
| 2                | 0900         | 23.3                         | 6.1              | 23.0                  | .11          | 7.0                           | 21.            | 1.             | 12.0           | .0552              | 1.8             | 225.     | .79           | 475.     | 473.                          | M              | 0.00     |          |
| 3                | 0900         | 23.3                         | 6.1              | 23.0                  | .15          | 6.9                           | 24.            | 9.             | 17.2           | .0786              | 3.0             | 103.     | .84           | 544.     | 549.                          | M              | .36      |          |
| 4                | 0900         | 26.3                         | 7.1              | 24.5                  | .23          | 7.2                           | 33.            | 7.             | 20.8           | .0980              | 4.1             | 104.     | .89           | 563.     | 567.                          | M              | .57      |          |
| 5                |              |                              |                  |                       |              | 7.2                           | 7.             | -7.            | 1.8            | .0294              | 4.1             | 155.     | .86           | 414.     | 449.                          | M              | .08      |          |
| 6                |              |                              |                  |                       |              | 7.2                           | 12.            | -2.            | 4.1            | .0400              | 1.9             | 152.     | .90           | 463.     | 463.                          | M              | .05      |          |
| 7                | 0900         | 28.1                         | 7.1              | 27.7                  | .14          | 7.2                           | 5.             | -12.           | -1.0           | .0272              | 3.2             | 240.     | .84           | 398.     | 368.                          | M              | 0.00     |          |
| 8                | 0900         | 27.2                         | 7.2              | 27.7                  | .13          | 7.4                           | 5.             | -13.           | -2.6           | .0245              | 4.3             | 259.     | .80           | 378.     | 345.                          | M              | 0.00     |          |
| 9                | 0900         | 27.3                         | 7.6              | 27.2                  | .14          | 7.5                           | 16.            | 3.             | 8.6            | .0412              | 5.7             | 318.     | .81           | 402.     | 329.                          | M              | 0.00     |          |
| 10               | 1100         | 27.1                         | 7.5              | 27.2                  | .15          | 7.7                           | 18.            | -3.            | 7.4            | .0381              | 4.0             | 289.     | .79           | 380.     | 358.                          | M              | 0.00     |          |
| 11               | 0900         | 26.7                         | 7.5              | 27.2                  | .19          | 7.8                           | 18.            | 0.             | 6.8            | .0384              | 3.5             | 294.     | .79           | 376.     | 354.                          | M              | 0.00     |          |
| 12               |              |                              |                  |                       |              | 7.6                           | 28.            | 0.             | 14.7           | .0591              | 1.0             | 127.     | .81           | 513.     | 531.                          | M              | 0.00     |          |
| 13               |              |                              |                  |                       |              | 7.6                           | 36.            | 22.            | 30.7           | .1217              | 2.8             | 106.     | .81           | 592.     | 621.                          | M              | .11      |          |
| 14               | 1200         | 26.7                         | 7.6              | 26.3                  | .22          | 7.5                           | 38.            | 30.            | 34.2           | .1694              | 5.4             | 55.      | .80           | 622.     | 656.                          | M              | .02      |          |
| 15               | 0900         | 26.2                         | 7.6              | 25.8                  | .30          | 8.0                           | 45.            | 26.            | 34.5           | .1335              | 4.7             | 237.     | .73           | 604.     | 554.                          | M              | 0.00     |          |
| 16               | 0900         | 25.1                         | 7.3              | 25.4                  | .30          | 7.9                           | 31.            | -1.            | 17.8           | .0702              | 5.0             | 270.     | .74           | 468.     | 446.                          | M              | 0.00     |          |
| 17               | 0900         | 24.7                         | 7.2              | 25.3                  | .31          | 6.4                           | 25.            | -3.            | 12.0           | .0424              | 1.2             | 314.     | .72           | 443.     | 377.                          | M              | 0.00     |          |
| 18               | 0900         | 24.7                         | 7.6              | 25.2                  | .30          | 6.2                           | 27.            | 8.             | 19.6           | .0655              | 3.4             | 295.     | .75           | 468.     | 434.                          | M              | 0.00     |          |
| 19               |              |                              |                  |                       |              | 6.6                           | 20.            | 7.             | 15.5           | .0763              | 5.8             | 35.      | .80           | 532.     | 565.                          | M              | .66      |          |
| 20               |              |                              |                  |                       |              | 7.3                           | 8.             | -8.            | 1.5            | .0312              | 11.0            | 200.     | .84           | 440.     | 440.                          | M              | .09      |          |
| 21               |              |                              |                  |                       |              | 7.8                           | 11.            | -14.           | -1.7           | .0253              | 4.0             | 183.     | .80           | 438.     | 438.                          | M              | .15      |          |
| 22               | 1145         | 28.7                         |                  |                       | .14          | 7.9                           | 16.            | -14.           | .1             | .0295              | 8.2             | 274.     | .80           | 427.     | 383.                          | M              | 0.00     |          |
| 23               | 1000         | 27.7                         | 7.8              | 27.5                  | .17          | 8.3                           | 1.             | -30.           | -9.9           | .0129              | 1.7             | 323.     | .76           | 381.     | 304.                          | M              | .02      |          |
| 24               | 0900         | 30.7                         | 8.0              | 30.5                  | .06          | 8.5                           | 21.            | 2.             | 11.0           | .0602              | 3.0             | 219.     | .87           | 505.     | 475.                          | M              | .15      |          |
| 25               | 0900         | 30.3                         | 7.9              | 29.9                  | .06          | 8.4                           | 21.            | 0.             | 12.4           | .0564              | 1.4             | 349.     | .81           | 461.     | 375.                          | M              | 0.00     |          |
| 26               |              |                              |                  |                       |              | 8.6                           | 26.            | 14.            | 19.4           | .0915              | 2.3             | 80.      | .90           | 559.     | 577.                          | M              | .45      |          |
| 27               |              |                              |                  |                       |              | 8.9                           | 26.            | 1.             | 17.2           | .0674              | 3.6             | 285.     | .90           | 562.     | 461.                          | M              | 0.00     |          |
| 28               | 1200         | 32.1                         | 8.5              | 32.9                  | .12          | 9.1                           | 33.            | 23.            | 28.2           | .1110              | 4.0             | 217.     | .89           | 567.     | 564.                          | M              | 0.00     |          |
| 29               | 0900         | 31.6                         | 8.4              | 32.4                  | .16          | 9.5                           | 30.            | 19.            | 26.3           | .1171              | 2.4             | 121.     | .87           | 563.     | 601.                          | M              | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |              |                               |                |                |                |                    |                 |          |               |          | 465.                          | TOTAL=         | 2.71     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QM=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VERMONT-- 3/72

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>SUR.<br>DEN. | SNOW<br>WE AT<br>2400<br>IN | SNOW<br>COURSE<br>DEPTH<br>IN | MIN<br>TA<br>F | MAX<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALBEDO | QA<br>LY | BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------|-----------------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------|----------------|----------|----------|
| 1                | 0900         | 30.3                         | .15                  | 8.7                         | 31.6                          | 23.            | 48.            | 34.2           | .1496              | 3.6             | 257.     | .76    | 622.     | 576.              | 30.9           | .06      |          |
| 2                | 0900         | 28.1                         | .28                  | 8.8                         | 28.9                          | 27.            | 35.            | 31.9           | .1605              | 5.3             | 90.      | .70    | 639.     | 640.              | 32.0           | .66      |          |
| 3                | 0900         | 31.2                         | .10                  | 9.0                         | 23.                           | 3.             | 23.            | 10.8           | .0575              | 5.1             | 104.     | .85    | 528.     | 533.              | 14.7           | .63      |          |
| 4                |              |                              |                      | 8.6                         | 20.                           | -4.            | 20.            | 11.1           | .0561              | 4.0             | 361.     | .78    | 453.     | 397.              | M              | 0.00     |          |
| 5                |              |                              |                      | 8.6                         | 27.                           | 16.            | 27.            | 20.6           | .1052              | 3.7             | 114.     | .89    | 573.     | 577.              | 21.4           | .31      |          |
| 6                |              |                              |                      | 8.5                         |                               | -4.            | 14.            | 5.7            | .0409              | 4.0             | 283.     | .90    | 461.     | 435.              | M              | .06      |          |
| 7                |              |                              |                      | 8.3                         |                               | -8.            | 33.            | 12.9           | .0642              | 3.2             | 75.      | .90    | 522.     | 549.              | 15.5           | .12      |          |
| 8                | 0900         | 34.6                         | .13                  | 8.2                         | 36.5                          | 14.            | 36.            | 26.8           | .1221              | 4.2             | 112.     | .88    | 575.     | 610.              | 25.3           | .24      |          |
| 9                | 0900         | 37.1                         | .06                  | 8.1                         | 36.7                          | -10.           | 12.            | 1.6            | .0298              | 4.6             | 346.     | .83    | 412.     | 382.              | M              | .08      |          |
| 10               | 0900         | 35.7                         | .09                  | 8.1                         | 35.9                          | -12.           | 18.            | 4.2            | .0327              | 3.5             | 333.     | .79    | 416.     | 404.              | M              | 0.00     |          |
| 11               |              |                              |                      | 7.9                         |                               | -7.            | 23.            | 11.7           | .0397              | 4.3             | 390.     | .79    | 465.     | 395.              | M              | 0.00     |          |
| 12               |              |                              |                      | 7.9                         |                               | 21.            | 34.            | 28.2           | .1333              | 3.1             | 101.     | .81    | 586.     | 620.              | 26.2           | 0.00     |          |
| 13               | 0900         | 34.2                         | .18                  | 8.1                         | 34.9                          | 11.            | 30.            | 21.3           | .0597              | 2.9             | 373.     | .76    | 457.     | 456.              | 10.0           | 0.00     |          |
| 14               | 1130         | 34.0                         | .18                  | 8.1                         | 34.9                          | 7.             | 27.            | 19.0           | .0609              | 3.6             | 308.     | .79    | 516.     | 492.              | M              | .11      |          |
| 15               | 0900         | 40.5                         | .13                  | 8.8                         | 41.2                          | 20.            | 30.            | 24.8           | .1301              | 1.6             | 125.     | .90    | 576.     | 598.              | 23.2           | .57      |          |
| 16               |              |                              |                      | 9.3                         |                               | 20.            | 39.            | 31.3           | .1632              | 3.5             | 253.     | .83    | 619.     | 587.              | 26.0           | 0.00     |          |
| 17               | 0900         | 35.7                         | .26                  | 9.9                         | 34.8                          | 34.            | 40.            | 37.4           | .2034              | 3.9             | 55.      | .82    | 661.     | 677.              | 32.0           | .80      |          |
| 18               |              |                              |                      | 10.4                        |                               | 18.            | 34.            | 27.5           | .1310              | 6.2             | 174.     | .90    | 590      | 600.              | 28.2           | .37      |          |
| 19               |              |                              |                      | 10.3                        |                               | 5.             | 20.            | 14.5           | .0589              | 5.4             | 507.     | .75    | 453.     | 354.              | 10.7           | 0.00     |          |
| 20               | 0900         | 34.1                         | .19                  | 11.5                        | 34.6                          | 2.             | 24.            | 15.4           | .0534              | 4.1             | 374.     | .79    | 487.     | 447.              | 12.6           | 0.00     |          |
| 21               | 0900         | 33.8                         | .26                  | 9.8                         | 34.5                          | 17.            | 35.            | 26.4           | .0966              | 2.4             | 344.     | .80    | 582.     | 519.              | 26.0           | .01      |          |
| 22               | 0900         | 33.6                         | .33                  | 10.7                        | 34.4                          | 27.            | 34.            | 31.8           | .1627              | 3.6             | 37.      | .78    | 615.     | 648.              | 31.5           | .49      |          |
| 23               | 0900         | 33.7                         | .28                  | 11.3                        | 34.5                          | 31.            | 36.            | 33.1           | .1607              | 2.8             | 142.     | .84    | 611.     | 639.              | 32.0           | .40      |          |
| 24               | 0900         | 35.3                         | .14                  | 11.6                        | 35.4                          | 22.            | 32.            | 27.1           | .1316              | 5.1             | 188.     | .88    | 604.     | 596.              | 29.3           | .09      |          |
| 25               |              |                              |                      | 11.6                        |                               | 18.            | 23.            | 19.9           | .0855              | 5.7             | 318.     | .81    | 564.     | 509.              | 22.9           | .05      |          |
| 26               |              |                              |                      | 11.4                        |                               | 16.            | 20.            | 17.4           | .0775              | 5.0             | 296.     | .85    | 543.     | 509.              | 19.7           | .07      |          |
| 27               | 0900         | 35.8                         | .10                  | 11.1                        | 36.0                          | 10.            | 22.            | 16.3           | .0707              | 5.7             | 399.     | .84    | 531.     | 451.              | 17.7           | .03      |          |
| 28               | 0900         | 34.2                         | .25                  | 11.5                        | 34.7                          | 18.            | 32.            | 25.3           | .1003              | 8.4             | 367.     | .81    | 588.     | 513.              | 27.4           | 0.00     |          |
| 29               | 0900         | 33.2                         | .28                  | 11.6                        | 34.2                          | 31.            | 44.            | 36.9           | .1496              | 4.4             | 428.     | .71    | 609.     | 535.              | 31.3           | 0.00     |          |
| 30               | 0900         | 32.0                         | .34                  | 11.3                        | 32.5                          | 29.            | 35.            | 30.5           | .1401              | 4.5             | 102.     | .79    | 574.     | 635.              | 32.0           | .09      |          |
| 31               | 0900         | 33.5                         | .17                  | 11.5                        | 31.6                          | 29.            | 41.            | 32.5           | .1399              | 2.1             | 282.     | .76    | 544.     | 594.              | 30.2           | .05      |          |
| MONTHLY AVERAGE= |              |                              |                      |                             |                               |                |                |                |                    |                 |          |        |          |                   |                | 531.     | 5.29     |
| TOTAL=           |              |                              |                      |                             |                               |                |                |                |                    |                 |          |        |          |                   |                | 531.     | 5.29     |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QH=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 4/72

| DAY              | OBS. TIME | DEPTH SNOW STAKE IN | SNOW COURSE WE IN | SNOW SUR. DEN. | PILLOW WE AT 2400 IN | MAX TA F | MIN TA F | AVE TA F | AVE EA IN.HG | AVE U MPH | Q1 LY | ALBEDO | Q4 LY | ANDERSON BAKER QA LY | AVE TS F | PX IN | PO IN |
|------------------|-----------|---------------------|-------------------|----------------|----------------------|----------|----------|----------|--------------|-----------|-------|--------|-------|----------------------|----------|-------|-------|
| 1                |           |                     |                   |                | 11.1                 | 44.      | 24.      | 33.6     | .1108        | 3.1       | 516.  | .68    | 491.  | 462.                 | 25.4     | 0.00  |       |
| 2                |           |                     |                   |                | 10.9                 | 41.      | 28.      | 34.7     | .1243        | 5.4       | 276.  | .71    | 588.  | 610.                 | 29.6     | .04   |       |
| 3                | 0900      | 31.8                | 10.5              | .12            | 11.1                 | 31.      | 28.      | 29.5     | .1328        | 6.2       | 203.  | .87    | 613.  | 608.                 | 30.7     | .10   |       |
| 4                | 0900      | 30.7                | 10.6              | .32            | 12.0                 | 36.      | 22.      | 29.7     | .1382        | 3.3       | 197.  | .84    | 578.  | 612.                 | 25.6     | .17   |       |
| 5                | 0900      | 32.3                | 10.7              | .14            | 11.7                 | 34.      | 16.      | 24.5     | .0793        | 4.5       | 528.  | .81    | 461.  | 423.                 | 19.7     | .05   |       |
| 6                | 0900      | 31.6                | 10.8              | .20            | 11.5                 | 32.      | 9.       | 21.1     | .0775        | 5.0       | 394.  | .81    | 471.  | 493.                 | 16.4     | .24   |       |
| 7                | 1100      | 33.5                | 11.1              | .14            | 11.5                 | 19.      | 8.       | 13.2     | .0567        | 5.6       | 397.  | .86    | 432.  | 457.                 | 8.4      | .02   |       |
| 8                |           |                     |                   |                | 10.9                 | 26.      | 9.       | 18.5     | .0645        | 7.6       | 586.  | .80    | 449.  | 370.                 | 16.7     | 0.00  |       |
| 9                |           |                     |                   |                | 11.0                 | 35.      | 20.      | 27.8     | .0897        | 7.1       | 514.  | .80    | 460.  | 458.                 | 23.1     | 0.00  |       |
| 10               |           |                     |                   |                | 10.7                 | 40.      | 23.      | 31.3     | .0913        | 5.3       | 575.  | .77    | 466.  | 433.                 | 23.7     | 0.00  |       |
| 11               | 0900      | 31.7                | 11.8              | .31            | 11.6                 | 40.      | 23.      | 31.8     | .1215        | 3.3       | 334.  | .75    | 555.  | 579.                 | 26.4     | .03   |       |
| 12               | 0900      | 30.7                | 11.3              | .36            | 10.9                 | 43.      | 25.      | 34.8     | .1307        | 4.3       | 452.  | .71    | 501.  | 537.                 | 27.7     | 0.00  |       |
| 13               | 0900      | 30.1                | 11.3              | .34            | 10.1                 | 35.      | 26.      | 30.9     | .1450        | 3.2       | 73.   | .78    | 531.  | 641.                 | 28.4     | .76   |       |
| 14               | 0900      | 33.6                | 12.6              | .30            | 10.9                 | 35.      | 28.      | 32.4     | .1621        | 4.3       | 149.  | .81    | 608.  | 639.                 | 31.0     | .08   |       |
| 15               |           |                     |                   |                | 11.6                 | 35.      | 28.      | 32.3     | .1621        | 3.5       | 50.   | .80    | 565.  | 651.                 | 30.0     | .39   |       |
| 16               |           |                     |                   |                | 11.9                 | 41.      | 33.      | 35.8     | .1812        | 2.9       | 274.  | .70    | 651.  | 627.                 | 31.4     | .08   |       |
| 17               | 0900      | 31.0                | 12.1              | .39            | 12.7                 | 49.      | 36.      | 40.3     | .1791        | 6.4       | 366.  | .68    | 552.  | 616.                 | 31.3     | .02   |       |
| 18               | 0900      | 30.2                | 11.7              | .33            | 12.7                 | 44.      | 32.      | 37.1     | .1535        | 3.3       | 383.  | .65    | 562.  | 592.                 | 29.5     | .03   |       |
| 19               | 0900      | 28.2                | 10.9              | .34            | 12.1                 | 51.      | 35.      | 39.4     | .2047        | 2.4       | 245.  | .63    | 607.  | 656.                 | 31.3     | .17   |       |
| 20               | 0900      | 27.0                | 9.8               | .22            | 11.9                 | 40.      | 33.      | 35.0     | .1583        | 3.0       | 178.  | .75    | 569.  | 649.                 | 29.6     | .13   |       |
| 21               | 0900      | 26.2                | 10.6              | .37            | 10.4                 | 37.      | 27.      | 32.9     | .0841        | 8.5       | 641.  | .61    | 475.  | 432.                 | 25.3     | 0.00  |       |
| 22               |           |                     |                   |                | 9.9                  | 46.      | 22.      | 36.2     | .0814        | 2.6       | 475.  | .61    | 558.  | 544.                 | 25.0     | .01   |       |
| 23               |           |                     |                   |                | 10.4                 | 40.      | 32.      | 35.3     | .1828        | 2.5       | 148.  | .80    | 574.  | 656.                 | 31.0     | .30   |       |
| 24               | 0900      | 24.6                | 9.5               | .33            | 10.7                 | 42.      | 29.      | 35.1     | .1596        | 3.5       | 246.  | .65    | 540.  | 635.                 | 28.7     | .05   |       |
| 25               | 0900      | 24.5                | 9.5               | .35            | 9.6                  | 33.      | 23.      | 28.4     | .0989        | 4.9       | 639.  | .62    | 473.  | 416.                 | 22.5     | 0.00  |       |
| 26               | 0900      | 24.3                | 9.5               | .35            | 9.1                  | 37.      | 21.      | 30.0     | .0933        | 3.3       | 464.  | .63    | 506.  | 526.                 | 19.8     | 0.00  |       |
| 27               | 0900      | 23.6                | 8.8               | .33            | 7.9                  | 34.      | 25.      | 30.7     | .0900        | 4.7       | 403.  | .62    | 550.  | 558.                 | 23.9     | 0.00  |       |
| 28               | 0900      | 22.6                | 8.8               | .31            | 8.2                  | 45.      | 28.      | 37.1     | .1112        | 4.5       | 545.  | .59    | 591.  | 520.                 | 28.6     | 0.00  |       |
| 29               |           |                     |                   |                | 8.1                  | 47.      | 34.      | 40.9     | .1330        | 5.5       | 565.  | .57    | 549.  | 529.                 | 29.6     | 0.00  |       |
| 30               |           |                     |                   |                | 6.9                  | 60.      | 32.      | 45.0     | .1349        | 4.4       | 655.  | .57    | 552.  | 492.                 | 27.1     | 0.00  |       |
| MONTHLY AVERAGE= |           |                     |                   |                |                      | 39.      | 25.      | 32.2     | 23.0         | 4.5       | 382.  | .70    | 536.  | 547.                 | TOTAL=   | 2.67  |       |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION

TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QM=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED

M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN

NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VERMONT-- 5/77

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | BAKER<br>QA<br>LY | ANDERSON<br>AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------|----------------------------|----------|----------|
| 1                | 0900         | 13.6                         | 4.5              | 13.7                  | .35                  | 5.3                           | 61.            | 36.            | 47.2           | .1594              | 3.6             | 474.     | .55          | 670.     | 615.              | 29.5                       | 0.00     |          |
| 2                | 0900         | 10.0                         | 3.7              | 10.6                  | .45                  | 4.8                           | 39.            | 36.            | 37.8           | .2023              | 1.3             | 50.      | .58          | 558.     | 681.              | 32.0                       | .80      |          |
| 3                | 0900         | 8.6                          | 3.3              | 9.5                   | .44                  | 4.1                           | 40.            | 36.            | 37.8           | .2126              | 1.8             | 70.      | .64          | 566.     | 679.              | 32.0                       | .92      |          |
| 4                | 0900         | 7.3                          | 2.8              | 8.0                   | .37                  | 2.5                           | 56.            | 35.            | 43.0           | .2316              | 3.6             | 105.     | .53          | 555.     | 705.              | 31.8                       | .90      |          |
| 5                | 0900         | 0.0                          | 2.0              | 5.4                   | .35                  | 1.4                           | 41.            | 34.            | 39.0           | .1984              | 4.3             | 144.     | .32          | 562.     | 678.              | 31.0                       | .13      |          |
| 6                |              |                              |                  |                       |                      | .2                            | 57.            | 34.            | 46.7           | .1689              | 4.3             | 530.     | .20          | 549.     | 590.              | 29.4                       | .02      |          |
| 7                |              |                              |                  |                       |                      | .2                            | 50.            | 32.            | 43.9           | .1837              | 4.6             | 583.     | .13          | 587.     | 549.              | M                          | .04      |          |
| 8                | 0950         | 0.0                          | 0.0              | 0.0                   |                      | .2                            | 55.            | 30.            | 43.3           | .1312              | 2.6             | 683.     | .14          | 569.     | 482.              | M                          | 0.00     |          |
| 9                |              |                              |                  |                       |                      | .2                            | 52.            | 34.            | 42.2           | .1463              | 2.2             | 376.     | M            | 629.     | 637.              | M                          | 0.00     |          |
| 10               |              |                              |                  |                       |                      | .2                            | 48.            | 33.            | 40.2           | .1303              | 3.0             | 407.     | M            | 592.     | 615.              | M                          | 0.00     |          |
| 11               |              |                              |                  |                       |                      | .2                            | 49.            | 34.            | 38.7           | .1394              | 5.4             | 233.     | M            | 494.     | 661.              | M                          | .11      |          |
| 12               |              |                              |                  |                       |                      | .2                            | 46.            | 37.            | 41.5           | .1694              | 6.5             | 398.     | M            | 626.     | 628.              | M                          | 0.00     |          |
| 13               |              |                              |                  |                       |                      | .2                            | 68.            | 35.            | 52.5           | .1761              | 3.2             | 643.     | M            | 563.     | 563.              | M                          | 0.00     |          |
| 14               |              |                              |                  |                       |                      | .2                            | 65.            | 43.            | 54.1           | .2679              | 2.9             | 233.     | M            | 564.     | 749.              | M                          | .15      |          |
| 15               |              |                              |                  |                       |                      | .2                            | 56.            | 50.            | 52.7           | .3418              | 1.9             | 134.     | M            | 650.     | 759.              | M                          | .20      |          |
| 16               |              |                              |                  |                       |                      | .2                            | 60.            | 50.            | 53.5           | .3565              | 1.2             | 151.     | M            | 672.     | 761.              | M                          | .07      |          |
| 17               |              |                              |                  |                       |                      | .2                            | 66.            | 49.            | 56.8           | .3413              | 2.5             | 349.     | M            | 738.     | 735.              | M                          | .01      |          |
| 18               |              |                              |                  |                       |                      | .2                            | 69.            | 46.            | 58.7           | .3339              | 2.2             | 418.     | M            | 728.     | 721.              | M                          | 0.00     |          |
| 19               |              |                              |                  |                       |                      | .2                            | 73.            | 52.            | 61.5           | .3445              | 2.9             | 590.     | M            | 698.     | 656.              | M                          | .03      |          |
| 20               |              |                              |                  |                       |                      | .2                            | 65.            | 51.            | 57.1           | .3576              | 2.8             | 276.     | M            | 664.     | 759.              | M                          | 0.00     |          |
| 21               |              |                              |                  |                       |                      | .2                            | 75.            | 52.            | 63.1           | .3666              | 3.6             | 603.     | M            | 723.     | 660.              | M                          | 0.00     |          |
| 22               |              |                              |                  |                       |                      | .2                            | 72.            | 48.            | 60.9           | .1758              | 4.4             | 727.     | M            | 623.     | 569.              | M                          | 0.00     |          |
| 23               |              |                              |                  |                       |                      | .2                            | 79.            | 46.            | 65.6           | .1849              | 4.5             | 715.     | M            | 658.     | 594.              | M                          | 0.00     |          |
| 24               |              |                              |                  |                       |                      | .2                            | 74.            | 51.            | 63.0           | .1843              | 4.4             | 701.     | M            | 663.     | 592.              | M                          | 0.00     |          |
| 25               |              |                              |                  |                       |                      | .2                            | 64.            | 39.            | 52.9           | .1236              | 3.0             | 736.     | M            | 568.     | 526.              | M                          | 0.00     |          |
| 26               |              |                              |                  |                       |                      | .2                            | 67.            | 34.            | 51.5           | .1669              | 3.0             | 716.     | M            | 586.     | 526.              | M                          | 0.00     |          |
| 27               |              |                              |                  |                       |                      | .2                            | 74.            | 40.            | 60.2           | .2037              | 3.7             | 708.     | M            | 640.     | 578.              | M                          | 0.00     |          |
| 28               |              |                              |                  |                       |                      | .2                            | 78.            | 52.            | 65.5           | .2528              | 3.9             | 686.     | M            | 682.     | 623.              | M                          | 0.00     |          |
| 29               |              |                              |                  |                       |                      | .2                            | 79.            | 51.            | 65.8           | .2451              | 3.3             | 713.     | M            | 679.     | 607.              | M                          | 0.00     |          |
| 30               |              |                              |                  |                       |                      | .2                            | 74.            | 48.            | 64.5           | .3604              | 3.4             | 463.     | M            | 746.     | 742.              | M                          | 0.00     |          |
| 31               |              |                              |                  |                       |                      | .2                            | 63.            | 59.            | 61.5           | .4472              | 3.5             | 145.     | M            | 681.     | 812.              | M                          | .15      |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          | M            | 631.     | 647.              | TOTAL=                     | 3.53     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WF=WATER EQUIVALENT EA=VAPOR PPESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW Q2=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOP PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 6/77

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COURSE<br>WE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QI<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|-------------------------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                                     |                      |                               | 64.            | 54.            | 59.2           | .4177              | 3.7             | 228.     |              | 684.     | 784.                          |                | .85      |          |
| 2                |              |                              |                                     |                      |                               | 54.            | 46.            | 49.8           | .2874              | 3.8             | 237.     |              | 590.     | 726.                          |                | .20      |          |
| 3                |              |                              |                                     |                      |                               | 72.            | 45.            | 59.9           | .2870              | 3.4             | 653.     |              | 693.     | 621.                          |                | 0.00     |          |
| 4                |              |                              |                                     |                      |                               | 64.            | 54.            | 60.0           | .4076              | 2.4             | 151.     |              | 695.     | 802.                          |                | .53      |          |
| 5                |              |                              |                                     |                      |                               | 68.            | 48.            | 57.7           | .2838              | 2.2             | 632.     |              | 695.     | 622.                          |                | .02      |          |
| 6                |              |                              |                                     |                      |                               | 67.            | 51.            | 57.2           | .3251              | 3.2             | 447.     |              | 700.     | 708.                          |                | .51      |          |
| 7                |              |                              |                                     |                      |                               | 55.            | 45.            | 51.2           | .3019              | 4.3             | 140.     |              | 642.     | 750.                          |                | .10      |          |
| 8                |              |                              |                                     |                      |                               | 54.            | 45.            | 50.9           | .2939              | 2.1             | 133.     |              | 674.     | 749.                          |                | .02      |          |
| 9                |              |                              |                                     |                      |                               | 57.            | 48.            | 53.3           | .3156              | 2.8             | 318.     |              | 644.     | 728.                          |                | .45      |          |
| 10               |              |                              |                                     |                      |                               | 49.            | 39.            | 41.7           | .2119              | 6.2             | 220.     |              | 495.     | 684.                          |                | .11      |          |
| 11               |              |                              |                                     |                      |                               | 52.            | 35.            | 43.0           | .1556              | 5.4             | 709.     |              | 570.     | 501.                          |                | 0.00     |          |
| 12               |              |                              |                                     |                      |                               | 64.            | 42.            | 52.1           | .1984              | 3.6             | 544.     |              | 680.     | 636.                          |                | 0.00     |          |
| 13               |              |                              |                                     |                      |                               | 70.            | 42.            | 58.2           | .2705              | 3.2             | 612.     |              | 697.     | 638.                          |                | 0.00     |          |
| 14               |              |                              |                                     |                      |                               | 76.            | 56.            | 66.5           | .4339              | 3.1             | 406.     |              | 810.     | 781.                          |                | 0.00     |          |
| 15               |              |                              |                                     |                      |                               | 79.            | 63.            | 69.2           | .5296              | 3.8             | 332.     |              | 815.     | 823.                          |                | .71      |          |
| 16               |              |                              |                                     |                      |                               | 69.            | 53.            | 62.7           | .4095              | 2.6             | 287.     |              | 762.     | 793.                          |                | .29      |          |
| 17               |              |                              |                                     |                      |                               | 65.            | 51.            | 57.3           | .3067              | 2.7             | 499.     |              | 716.     | 689.                          |                | 0.00     |          |
| 18               |              |                              |                                     |                      |                               | 69.            | 52.            | 60.4           | .3505              | 2.5             | 496.     |              | 758.     | 709.                          |                | 0.00     |          |
| 19               |              |                              |                                     |                      |                               | 63.            | 55.            | 58.7           | .1810              | 3.1             | 214.     |              | 819.     | 784.                          |                | 0.00     |          |
| 20               |              |                              |                                     |                      |                               | 71.            | 57.            | 63.4           | .4679              | 2.4             | 294.     |              | 817.     | 796.                          |                | 0.00     |          |
| 21               |              |                              |                                     |                      |                               | 71.            | 61.            | 65.5           | .4561              | 3.8             | 295.     |              | 826.     | 809.                          |                | 0.00     |          |
| 22               |              |                              |                                     |                      |                               | 71.            | 58.            | 64.7           | .4190              | 4.6             | 300.     |              | 823.     | 802.                          |                | 0.00     |          |
| 23               |              |                              |                                     |                      |                               | 64.            | 56.            | 59.2           | .3571              | 2.8             | 217.     |              | 752.     | 787.                          |                | .15      |          |
| 24               |              |                              |                                     |                      |                               | 62.            | 51.            | 57.3           | .3587              | 2.0             | 153.     |              | 668.     | 785.                          |                | .16      |          |
| 25               |              |                              |                                     |                      |                               | 59.            | 51.            | 56.1           | .3510              | 1.0             | 163.     |              | 766.     | 776.                          |                | .03      |          |
| 26               |              |                              |                                     |                      |                               | 63.            | 49.            | 56.2           | .3376              | 1.7             | 335.     |              | 688.     | 741.                          |                | .18      |          |
| 27               |              |                              |                                     |                      |                               | 67.            | 47.            | 58.5           | .3604              | 2.8             | 420.     |              | 750.     | 728.                          |                | 0.00     |          |
| 28               |              |                              |                                     |                      |                               | 70.            | 50.            | 60.2           | .4033              | 1.5             | 372.     |              | 749.     | 754.                          |                | 2.29     |          |
| 29               |              |                              |                                     |                      |                               | 74.            | 53.            | 63.6           | .4472              | 1.6             | 611.     |              | 759.     | 674.                          |                | 0.00     |          |
| 30               |              |                              |                                     |                      |                               | 65.            | 55.            | 59.5           | .4127              | 1.3             | 208.     |              | 666.     | 790.                          |                | .18      |          |
| MONTHLY AVERAGE= |              |                              |                                     |                      |                               | 65.            | 50.            | 57.8           | 49.2               | 3.0             | 354.     |              | 713.     | 732.                          | TOTAL=         | 6.78     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (ATP) QI=INCOMING SOLAR RADIATION QI=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QI=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA---NOAA--ARS SNOW RESEARCH STATION. DANVILLE,VERMONT-- 7/72

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                  |                       |                      |                               | 68.            | 54.            | 59.5           | .4108              | 2.1             | 281.     |        | 753.     | 775.                          |                | 0.00     |          |
| 2                |              |                              |                  |                       |                      |                               | 80.            | 52.            | 66.5           | .3990              | 3.2             | 629.     |        | 752.     | 674.                          |                | 0.00     |          |
| 3                |              |                              |                  |                       |                      |                               | 67.            | 51.            | 60.5           | .4228              | 2.8             | 103.     |        | 715.     | 811.                          |                | .90      |          |
| 4                |              |                              |                  |                       |                      |                               | 61.            | 44.            | 52.2           | .2594              | 4.0             | 579.     |        | 677.     | 619.                          |                | 0.00     |          |
| 5                |              |                              |                  |                       |                      |                               | 59.            | 43.            | 51.4           | .2471              | 1.9             | 350.     |        | 676.     | 706.                          |                | 0.00     |          |
| 6                |              |                              |                  |                       |                      |                               | 67.            | 41.            | 55.0           | .2696              | 1.5             | 540.     |        | 700.     | 653.                          |                | 0.00     |          |
| 7                |              |                              |                  |                       |                      |                               | 67.            | 48.            | 57.6           | .3191              | 1.3             | 482.     |        | 699.     | 694.                          | .04            |          |          |
| 8                |              |                              |                  |                       |                      |                               | 70.            | 46.            | 58.4           | .3293              | 1.9             | 496.     |        | 677.     | 693.                          |                | 0.00     |          |
| 9                |              |                              |                  |                       |                      |                               | 72.            | 48.            | 60.3           | .3461              | 1.7             | 552.     |        | 726.     | 677.                          |                | 0.00     |          |
| 10               |              |                              |                  |                       |                      |                               | 64.            | 53.            | 60.1           | .4171              | 2.7             | 85.      |        | 673.     | 809.                          |                | 1.44     |          |
| 11               |              |                              |                  |                       |                      |                               | 72.            | 54.            | 63.5           | .4052              | 2.6             | 571.     |        | 733.     | 686.                          |                | 0.00     |          |
| 12               |              |                              |                  |                       |                      |                               | 83.            | 54.            | 68.6           | .4729              | 2.1             | 614.     |        | 786.     | 693.                          |                | 0.00     |          |
| 13               |              |                              |                  |                       |                      |                               | 79.            | 62.            | 69.2           | .5126              | 2.6             | 437.     |        | 780.     | 783.                          | .01            |          |          |
| 14               |              |                              |                  |                       |                      |                               | 75.            | 65.            | 69.0           | .5359              | 2.2             | 328.     |        | 825.     | 820.                          | .01            |          |          |
| 15               |              |                              |                  |                       |                      |                               | 83.            | 65.            | 74.4           | .5862              | 3.0             | 508.     |        | 858.     | 784.                          |                | 0.00     |          |
| 16               |              |                              |                  |                       |                      |                               | 75.            | 63.            | 69.7           | .5471              | 2.3             | 268.     |        | 795.     | 841.                          | .33            |          |          |
| 17               |              |                              |                  |                       |                      |                               | 78.            | 60.            | 68.9           | .4924              | 2.4             | 606.     |        | 778.     | 697.                          | .57            |          |          |
| 18               |              |                              |                  |                       |                      |                               | 82.            | 60.            | 71.8           | .5073              | 2.2             | 614.     |        | 810.     | 709.                          |                | 0.00     |          |
| 19               |              |                              |                  |                       |                      |                               | 77.            | 62.            | 70.3           | .5643              | 1.9             | 294.     |        | 786.     | 838.                          | .08            |          |          |
| 20               |              |                              |                  |                       |                      |                               | 76.            | 60.            | 68.3           | .5066              | 1.9             | 437.     |        | 815.     | 775.                          |                | 0.00     |          |
| 21               |              |                              |                  |                       |                      |                               | 77.            | 62.            | 70.0           | .5693              | 2.3             | 151.     |        | 717.     | 865.                          | 1.86           |          |          |
| 22               |              |                              |                  |                       |                      |                               | 72.            | 59.            | 65.1           | .3828              | 2.5             | 601.     |        | 783.     | 672.                          |                | 0.00     |          |
| 23               |              |                              |                  |                       |                      |                               | 74.            | 58.            | 65.0           | .4021              | 1.9             | 565.     |        | 718.     | 691.                          | .13            |          |          |
| 24               |              |                              |                  |                       |                      |                               | 73.            | 59.            | 63.1           | .4222              | 2.2             | 288.     |        | 773.     | 792.                          | .21            |          |          |
| 25               |              |                              |                  |                       |                      |                               | 75.            | 54.            | 62.4           | .4039              | 1.9             | 437.     |        | 733.     | 736.                          | .52            |          |          |
| 26               |              |                              |                  |                       |                      |                               | 64.            | 56.            | 59.5           | .3740              | 3.5             | 233.     |        | 737.     | 783.                          | .07            |          |          |
| 27               |              |                              |                  |                       |                      |                               | 66.            | 56.            | 61.1           | .3781              | 2.3             | 311.     |        | 720.     | 772.                          | .03            |          |          |
| 28               |              |                              |                  |                       |                      |                               | 70.            | 51.            | 61.0           | .3565              | 2.6             | 468.     |        | 753.     | 712.                          |                | 0.00     |          |
| 29               |              |                              |                  |                       |                      |                               | 70.            | 51.            | 59.7           | .3293              | 2.4             | 528.     |        | 680.     | 675.                          |                | 0.00     |          |
| 30               |              |                              |                  |                       |                      |                               | 71.            | 49.            | 59.7           | .3010              | 2.4             | 540.     |        | 694.     | 667.                          |                | 0.00     |          |
| 31               |              |                              |                  |                       |                      |                               | 74.            | 48.            | 62.2           | .3643              | 2.1             | 488.     |        | 749.     | 708.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               | 72.            | 54.            | 63.4           | 53.6               | 2.3             | 432.     |        | 744.     | 736.                          | TOTAL=         | 6.20     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) QI=INCOMING SOLAR RADIATION OA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VFRMONT-- 8/72

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>SUR.<br>DEN. | SNOW<br>COURSE<br>WE<br>DEPTH<br>IN | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------|-------------------------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                      |                                     |                               | 74.            | 54.            | 63.3           | .3846              | 2.2             | 452.     |        | 751.     | 729.                          |                | 0.00     |          |
| 2                |              |                              |                      |                                     |                               | 66.            | 49.            | 59.2           | .2944              | 1.7             | 442.     |        | 661.     | 708.                          |                | .52      |          |
| 3                |              |                              |                      |                                     |                               | 67.            | 55.            | 60.8           | .3978              | 3.6             | 86.      |        | 758.     | 813.                          |                | .37      |          |
| 4                |              |                              |                      |                                     |                               | 62.            | 43.            | 53.1           | .2500              | 4.1             | 654.     |        | 641.     | 554.                          |                | 0.00     |          |
| 5                |              |                              |                      |                                     |                               | 68.            | 42.            | 55.1           | .2447              | 3.5             | 668.     |        | 617.     | 552.                          |                | 0.00     |          |
| 6                |              |                              |                      |                                     |                               | 69.            | 46.            | 58.8           | .2991              | 2.4             | 461.     |        | 695.     | 694.                          |                | 0.00     |          |
| 7                |              |                              |                      |                                     |                               | 67.            | 56.            | 61.8           | .4114              | 3.8             | 82.      |        | 732.     | 820.                          |                | .41      |          |
| 8                |              |                              |                      |                                     |                               | 68.            | 55.            | 61.5           | .4527              | 3.7             | 321.     |        | 649.     | 768.                          |                | .13      |          |
| 9                |              |                              |                      |                                     |                               | 69.            | 53.            | 60.2           | .4052              | 3.6             | 390.     |        | 722.     | 733.                          |                | .01      |          |
| 10               |              |                              |                      |                                     |                               | 55.            | 48.            | 51.6           | .2679              | 3.4             | 190.     |        | 592.     | 742.                          |                | .13      |          |
| 11               |              |                              |                      |                                     |                               | 66.            | 40.            | 54.3           | .2641              | 2.7             | 621.     |        | 645.     | 571.                          |                | 0.00     |          |
| 12               |              |                              |                      |                                     |                               | 66.            | 52.            | 59.5           | .3787              | 2.0             | 215.     |        | 735.     | 784.                          |                | 0.00     |          |
| 13               |              |                              |                      |                                     |                               | 68.            | 48.            | 60.5           | .3516              | 3.4             | 539.     |        | 743.     | 656.                          |                | 0.00     |          |
| 14               |              |                              |                      |                                     |                               | 60.            | 47.            | 54.0           | .2879              | 1.4             | 219.     |        | 679.     | 749.                          |                | .04      |          |
| 15               |              |                              |                      |                                     |                               | 67.            | 49.            | 56.7           | .2385              | 2.9             | 554.     |        | 659.     | 619.                          |                | 0.00     |          |
| 16               |              |                              |                      |                                     |                               | 64.            | 45.            | 55.2           | .2784              | 1.4             | 403.     |        | 685.     | 692.                          |                | 0.00     |          |
| 17               |              |                              |                      |                                     |                               | 59.            | 50.            | 55.0           | .3303              | 1.6             | 131.     |        | 775.     | 771.                          |                | 0.00     |          |
| 18               |              |                              |                      |                                     |                               | 62.            | 55.            | 58.7           | .4058              | 3.5             | 46.      |        | 683.     | 803.                          |                | .34      |          |
| 19               |              |                              |                      |                                     |                               | 73.            | 50.            | 62.3           | .3740              | 3.6             | 568.     |        | 716.     | 639.                          |                | 0.00     |          |
| 20               |              |                              |                      |                                     |                               | 76.            | 47.            | 58.8           | .3010              | 2.6             | 622.     |        | 639.     | 578.                          |                | 0.00     |          |
| 21               |              |                              |                      |                                     |                               | 73.            | 45.            | 59.0           | .3282              | 2.1             | 602.     |        | 667.     | 592.                          |                | 0.00     |          |
| 22               |              |                              |                      |                                     |                               | 78.            | 55.            | 65.2           | .4209              | 2.2             | 533.     |        | 746.     | 673.                          |                | 0.00     |          |
| 23               |              |                              |                      |                                     |                               | 77.            | 56.            | 66.1           | .4909              | 1.3             | 348.     |        | 795.     | 777.                          |                | 0.00     |          |
| 24               |              |                              |                      |                                     |                               | 76.            | 62.            | 67.9           | .5281              | 1.4             | 334.     |        | 817.     | 792.                          |                | 0.00     |          |
| 25               |              |                              |                      |                                     |                               | 80.            | 62.            | 68.5           | .5660              | 1.1             | 306.     |        | 801.     | 808.                          |                | .49      |          |
| 26               |              |                              |                      |                                     |                               | 75.            | 58.            | 66.9           | .4541              | .5              | 464.     |        | 757.     | 720.                          |                | 0.00     |          |
| 27               |              |                              |                      |                                     |                               | 71.            | 58.            | 64.9           | .4672              | .8              | 193.     |        | 747.     | 819.                          |                | .33      |          |
| 28               |              |                              |                      |                                     |                               | 71.            | 62.            | 66.5           | .4931              | 2.1             | 354.     |        | 739.     | 773.                          |                | .03      |          |
| 29               |              |                              |                      |                                     |                               | 71.            | 51.            | 62.5           | .3846              | 3.0             | 532.     |        | 709.     | 644.                          |                | 0.00     |          |
| 30               |              |                              |                      |                                     |                               | 70.            | 50.            | 59.3           | .3488              | 3.3             | 533.     |        | 649.     | 623.                          |                | .12      |          |
| 31               |              |                              |                      |                                     |                               | 78.            | 50.            | 63.0           | .4158              | 1.7             | 537.     |        | 726.     | 640.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                      |                                     |                               | 69.            | 51.            | 60.3           | 50.7               | 2.5             | 400.     |        | 707.     | 704.                          | TOTAL=         | 2.96     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOUR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA--ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 9/72

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COUPSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | ANDERSON<br>BAKER |          |        | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|-------------------|----------|--------|----------------|----------|----------|
|                  |              |                              |                  |                       |                      |                               |                |                |                |                    |                 | QA<br>LY          | Q1<br>LY | ALBEDO |                |          |          |
| 1                |              |                              |                  |                       |                      |                               | 77.            | 56.            | 66.1           | .4547              | 2.1             | 662.              | 742.     |        | 662.           | 0.00     |          |
| 2                |              |                              |                  |                       |                      |                               | 71.            | 54.            | 62.4           | .4158              | 2.6             | 746.              | 740.     |        | 746.           | 0.00     |          |
| 3                |              |                              |                  |                       |                      |                               | 66.            | 55.            | 60.6           | .4045              | 1.5             | 769.              | 769.     |        | 769.           | 0.00     |          |
| 4                |              |                              |                  |                       |                      |                               | 56.            | 53.            | 54.4           | .3344              | 4.8             | 766.              | 758.     |        | 766.           | 0.00     |          |
| 5                |              |                              |                  |                       |                      |                               | 63.            | 43.            | 53.8           | .2670              | 3.3             | 569.              | 625.     |        | 569.           | 0.00     |          |
| 6                |              |                              |                  |                       |                      |                               | 65.            | 42.            | 53.9           | .2524              | 3.0             | 590.              | 635.     |        | 590.           | 0.00     |          |
| 7                |              |                              |                  |                       |                      |                               | 69.            | 41.            | 54.9           | .3038              | 1.2             | 594.              | 657.     |        | 594.           | 0.00     |          |
| 8                |              |                              |                  |                       |                      |                               | 61.            | 51.            | 56.7           | .3799              | 1.0             | 77.               | 576.     |        | 787.           | .21      |          |
| 9                |              |                              |                  |                       |                      |                               | 59.            | 45.            | 54.2           | .2883              | 3.1             | 697.              | 639.     |        | 697.           | .07      |          |
| 10               |              |                              |                  |                       |                      |                               | 59.            | 43.            | 50.2           | .2162              | 4.7             | 559.              | 585.     |        | 559.           | 0.00     |          |
| 11               |              |                              |                  |                       |                      |                               | 67.            | 43.            | 54.7           | .2865              | 2.4             | 678.              | 689.     |        | 678.           | 0.00     |          |
| 12               |              |                              |                  |                       |                      |                               | 66.            | 42.            | 55.6           | .3077              | 2.0             | 727.              | 726.     |        | 727.           | 0.00     |          |
| 13               |              |                              |                  |                       |                      |                               | 61.            | 41.            | 51.4           | .2930              | 1.5             | 724.              | 661.     |        | 724.           | .10      |          |
| 14               |              |                              |                  |                       |                      |                               | 65.            | 42.            | 56.8           | .3615              | 2.5             | 777.              | 699.     |        | 777.           | .17      |          |
| 15               |              |                              |                  |                       |                      |                               | 60.            | 37.            | 48.8           | .2440              | 2.1             | 571.              | 595.     |        | 571.           | 0.00     |          |
| 16               |              |                              |                  |                       |                      |                               | 66.            | 45.            | 56.1           | .3272              | 2.7             | 706.              | 699.     |        | 706.           | 0.00     |          |
| 17               |              |                              |                  |                       |                      |                               | 74.            | 51.            | 64.0           | .4293              | 2.8             | 801.              | 770.     |        | 801.           | 0.00     |          |
| 18               |              |                              |                  |                       |                      |                               | 73.            | 49.            | 62.4           | .3881              | 2.2             | 682.              | 743.     |        | 682.           | 0.00     |          |
| 19               |              |                              |                  |                       |                      |                               | 63.            | 43.            | 52.1           | .2967              | 3.3             | 743.              | 681.     |        | 743.           | .02      |          |
| 20               |              |                              |                  |                       |                      |                               | 61.            | 34.            | 47.6           | .1961              | 2.1             | 532.              | 569.     |        | 532.           | 0.00     |          |
| 21               |              |                              |                  |                       |                      |                               | 65.            | 41.            | 53.8           | .2662              | 3.2             | 574.              | 640.     |        | 574.           | 0.00     |          |
| 22               |              |                              |                  |                       |                      |                               | 57.            | 35.            | 50.2           | .2528              | 3.5             | 663.              | 662.     |        | 663.           | 0.00     |          |
| 23               |              |                              |                  |                       |                      |                               | 56.            | 31.            | 41.7           | .1666              | 1.8             | 507.              | 558.     |        | 507.           | 0.00     |          |
| 24               |              |                              |                  |                       |                      |                               | 53.            | 37.            | 48.5           | .2532              | 2.3             | 725.              | 688.     |        | 725.           | .01      |          |
| 25               |              |                              |                  |                       |                      |                               | 67.            | 53.            | 58.4           | .4070              | 1.3             | 757.              | 784.     |        | 757.           | 0.00     |          |
| 26               |              |                              |                  |                       |                      |                               | 71.            | 58.            | 65.1           | .4887              | 2.0             | 815.              | 763.     |        | 815.           | .04      |          |
| 27               |              |                              |                  |                       |                      |                               | 66.            | 40.            | 55.9           | .3106              | 3.9             | 671.              | 673.     |        | 671.           | .01      |          |
| 28               |              |                              |                  |                       |                      |                               | 56.            | 30.            | 43.9           | .1782              | 2.0             | 510.              | 541.     |        | 510.           | 0.00     |          |
| 29               |              |                              |                  |                       |                      |                               | 54.            | 38.            | 46.9           | .2528              | 4.1             | 727.              | 73.      |        | 727.           | .32      |          |
| 30               |              |                              |                  |                       |                      |                               | 63.            | 35.            | 50.3           | .2944              | 4.9             | 751.              | 635.     |        | 751.           | .42      |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                | 44.                | 45.9            | 673.              | 680.     | TOTAL= | 1.37           |          |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW Q2=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOUR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 10/72

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>SUR.<br>DEN. | SNOW<br>WE<br>IN | SNOW<br>COUPSE<br>DEPTH<br>IN | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------|------------------|-------------------------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                      |                  |                               | 31.            | 38.2           | .1501              | 2.3             | 394.     |        | 560.     | 514.                          |                | 0.00     |          |
| 2                |              |                              |                      |                  |                               | 30.            | 41.5           | .1849              | .9              | 227.     |        | 633.     | 644.                          |                | 0.00     |          |
| 3                |              |                              |                      |                  |                               | 38.            | 49.7           | .2455              | 1.5             | 337.     |        | 651.     | 615.                          |                | 0.00     |          |
| 4                |              |                              |                      |                  |                               | 46.            | 56.0           | .3019              | 1.5             | 364.     |        | 681.     | 624.                          |                | 0.00     |          |
| 5                |              |                              |                      |                  |                               | 45.            | 55.1           | .2645              | 2.3             | 372.     |        | 634.     | 606.                          |                | 0.00     |          |
| 6                |              |                              |                      |                  |                               | 43.            | 52.9           | .2788              | 2.6             | 351.     |        | 670.     | 611.                          |                | 0.00     |          |
| 7                |              |                              |                      |                  |                               | 48.            | 53.8           | .3298              | 3.1             | 38.      |        | 579.     | 772.                          |                | 1.83     |          |
| 8                |              |                              |                      |                  |                               | 36.            | 44.8           | .1997              | 5.1             | 281.     |        | 564.     | 617.                          |                | .12      |          |
| 9                |              |                              |                      |                  |                               | 37.            | 30.            | .1198              | 3.8             | 40.      |        | 616.     | 652.                          |                | .03      |          |
| 10               |              |                              |                      |                  |                               | 40.            | 30.7           | .1034              | 3.3             | 354.     |        | 533.     | 476.                          |                | 0.00     |          |
| 11               |              |                              |                      |                  |                               | 25.            | 41.2           | .1262              | 3.7             | 327.     |        | 571.     | 547.                          |                | 0.00     |          |
| 12               |              |                              |                      |                  |                               | 36.            | 45.2           | .2289              | 2.6             | 36.      |        | 575.     | 721.                          |                | .15      |          |
| 13               |              |                              |                      |                  |                               | 24.            | 30.7           | .1071              | 2.6             | 256.     |        | 543.     | 549.                          |                | .03      |          |
| 14               |              |                              |                      |                  |                               | 25.            | 35.2           | .1384              | 2.4             | 65.      |        | 580.     | 661.                          |                | .20      |          |
| 15               |              |                              |                      |                  |                               | 36.            | 29.1           | .1104              | 4.5             | 179.     |        | 564.     | 587.                          |                | .14      |          |
| 16               |              |                              |                      |                  |                               | 41.            | 33.0           | .1294              | 3.3             | 79.      |        | 606.     | 646.                          |                | 0.00     |          |
| 17               |              |                              |                      |                  |                               | 26.            | 38.4           | .1358              | 3.5             | 271.     |        | 566.     | 564.                          |                | .09      |          |
| 18               |              |                              |                      |                  |                               | 33.            | 25.6           | .0787              | 2.4             | 308.     |        | 464.     | 462.                          |                | 0.00     |          |
| 19               |              |                              |                      |                  |                               | 32.            | 24.1           | .0758              | 2.5             | 170.     |        | 468.     | 561.                          |                | 0.00     |          |
| 20               |              |                              |                      |                  |                               | 35.            | 16.            | .0692              | 3.1             | 318.     |        | 431.     | 435.                          |                | 0.00     |          |
| 21               |              |                              |                      |                  |                               | 41.            | 31.0           | .0866              | 2.3             | 283.     |        | 534.     | 499.                          |                | 0.00     |          |
| 22               |              |                              |                      |                  |                               | 37.            | 36.2           | .1428              | 1.5             | 61.      |        | 649.     | 666.                          |                | 0.00     |          |
| 23               |              |                              |                      |                  |                               | 36.            | 42.5           | .2404              | 2.0             | 21.      |        | 577.     | 707.                          |                | .35      |          |
| 24               |              |                              |                      |                  |                               | 51.            | 43.0           | .2408              | 2.3             | 57.      |        | 653.     | 704.                          |                | .08      |          |
| 25               |              |                              |                      |                  |                               | 34.            | 32.4           | .1583              | 2.8             | 39.      |        | 644.     | 650.                          |                | 0.00     |          |
| 26               |              |                              |                      |                  |                               | 45.            | 34.9           | .1522              | 1.8             | 270.     |        | 541.     | 514.                          |                | 0.00     |          |
| 27               |              |                              |                      |                  |                               | 58.            | 41.0           | .1666              | 1.3             | 284.     |        | 557.     | 522.                          |                | 0.00     |          |
| 28               |              |                              |                      |                  |                               | 52.            | 46.4           | .2492              | 3.0             | 44.      |        | 665.     | 726.                          |                | .20      |          |
| 29               |              |                              |                      |                  |                               | 53.            | 43.2           | .2373              | 3.7             | 41.      |        | 579.     | 708.                          |                | .32      |          |
| 30               |              |                              |                      |                  |                               | 29.            | 27.0           | .1052              | 3.1             | 119.     |        | 575.     | 592.                          |                | 0.00     |          |
| 31               |              |                              |                      |                  |                               | 36.            | 21.            | .0945              | 1.9             | 275.     |        | 521.     | 451.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                      |                  |                               |                |                |                    |                 | 46.      | 30.    | 38.3     | 30.4                          | 2.7            | 202.     | 580.     |
|                  |              |                              |                      |                  |                               |                |                |                    |                 | TOTAL=   |        | 600.     | 3.63                          |                |          |          |

THE SYMBOLS USED ARE AS FOLLOWS.  
WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, OANVILL, VERMONT-- 11/72

| OAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>SUR.<br>DEN.<br>IN | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEOO<br>LY | QV<br>LY | BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------|----------------|----------|----------|
| 1                |              |                              |                            |                               | 38.            | 28.            | 33.6           | .1278              | 2.3             | 157.     | M            | 627.     | 598.              |                | 0.00     |          |
| 2                |              |                              |                            |                               | 44.            | 35.            | 39.0           | .2119              | 2.5             | 14.      | M            | 592.     | 588.              |                | .25      |          |
| 3                |              |                              |                            |                               | 51.            | 29.            | 40.7           | .2424              | 3.4             | 68.      | M            | 584.     | 686.              |                | .40      |          |
| 4                |              |                              |                            |                               | 30.            | 26.            | 28.0           | .1337              | 1.7             | 39.      | M            | 622.     | 625.              |                | .13      |          |
| 5                |              |                              |                            |                               | 32.            | 26.            | 30.0           | .1580              | .8              | 13.      | M            | 657.     | 639.              |                | .31      |          |
| 6                |              |                              |                            |                               | 34.            | 30.            | 32.6           | .1689              | .7              | 32.      | M            | 694.     | 651.              |                | 0.00     |          |
| 7                |              |                              |                            |                               | 35.            | 26.            | 31.0           | .1583              | .9              | 96.      | M            | 613.     | 619.              |                | 0.00     |          |
| 8                |              |                              |                            |                               | 39.            | 33.            | 36.9           | .1948              | 2.3             | 12.      | M            | 562.     | 676.              |                | .96      |          |
| 9                |              |                              |                            |                               | 37.            | 33.            | 34.8           | .1714              | 5.6             | 105.     | M            | 603.     | 631.              |                | .58      |          |
| 10               |              |                              |                            |                               | 35.            | 31.            | 32.5           | .1575              | 3.5             | 96.      | M            | 668.     | 623.              |                | 0.00     |          |
| 11               |              |                              |                            |                               | 35.            | 31.            | 33.2           | .1723              | 1.7             | 35.      | M            | 654.     | 653.              |                | 0.00     |          |
| 12               |              |                              |                            |                               | 37.            | 34.            | 35.3           | .1837              | 1.1             | 35.      | M            | 670.     | 664.              |                | .01      |          |
| 13               |              |                              |                            |                               | 40.            | 33.            | 35.8           | .1761              | 1.5             | 86.      | M            | 625.     | 645.              |                | .06      |          |
| 14               |              |                              |                            |                               | 33.            | 25.            | 27.7           | .1236              | 3.1             | 34.      | M            | 634.     | 624.              |                | .31      |          |
| 15               |              |                              |                            |                               | 24.            | 20.            | 21.5           | .0943              | 4.8             | 55.      | M            | 600.     | 586.              |                | .14      |          |
| 16               |              |                              |                            |                               | 20.            | 8.             | 17.1           | .0765              | 3.1             | 116.     | M            | 500.     | 526.              |                | .02      |          |
| 17               |              |                              |                            |                               | 28.            | 7.             | 18.2           | .0838              | .8              | 205.     | M            | 462.     | 422.              |                | 0.00     |          |
| 18               |              |                              |                            |                               | 38.            | 18.            | 26.1           | .0996              | 1.5             | 239.     | M            | 460.     | 405.              |                | 0.00     |          |
| 19               |              |                              |                            |                               | 33.            | 17.            | 26.1           | .1102              | 1.1             | 259.     | M            | 459.     | 406.              |                | .04      |          |
| 20               |              |                              |                            | .5                            | 34.            | 25.            | 29.5           | .1389              | 4.8             | 50.      | M            | 573.     | 627.              |                | .81      |          |
| 21               |              |                              |                            | .5                            | 24.            | 12.            | 18.6           | .0828              | 4.0             | 104.     | M            | 554.     | 537.              |                | .04      |          |
| 22               |              |                              |                            | .5                            | 18.            | 3.             | 10.5           | .0562              | 2.9             | 217.     | .72          | 380.     | 346.              |                | 0.00     |          |
| 23               |              |                              |                            | .5                            | 19.            | 0.             | 11.5           | .0633              | 2.2             | 147.     | .78          | 491.     | 456.              |                | 0.00     |          |
| 24               |              |                              |                            | .5                            | 31.            | 21.            | 28.5           | .1316              | 4.1             | 27.      | .78          | 623.     | 629.              |                | .07      |          |
| 25               |              |                              |                            | .5                            | 32.            | 29.            | 30.3           | .1354              | 2.3             | 50.      | .78          | 626.     | 630.              |                | 0.00     |          |
| 26               |              |                              |                            | 1.2                           | 47.            | 29.            | 36.3           | .1788              | 3.0             | 17.      | .88          | 570.     | 672.              |                | 1.02     |          |
| 27               |              |                              |                            | 1.2                           | 35.            | 34.            | 34.5           | .1291              | 4.5             | 45.      | .76          | 632.     | 654.              |                | 0.00     |          |
| 28               |              |                              |                            | 1.2                           | 38.            | 31.            | 34.0           | .1491              | 2.5             | 51.      | .78          | 579.     | 648.              |                | .32      |          |
| 29               |              |                              |                            | 1.2                           | 31.            | 9.             | 23.0           | .0981              | 2.7             | 135.     | .81          | 516.     | 513.              |                | .04      |          |
| 30               |              |                              |                            | 1.2                           | 22.            | 7.             | 16.5           | .0796              | 1.2             | 117.     | .79          | 519.     | 503.              |                | .17      |          |
| MONTHLY AVERAGE= |              |                              |                            |                               |                | 33.            | 23.            | 28.4               | 25.1            | 89.      | M            | 579.     | 586.              | TOTAL=         | 5.68     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-APS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 12/72

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COUPE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>IN.HG<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|----------------------|----------------------|-------------------------------|----------------|----------------|----------------|-----------------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                | 0900         | 14.6                         |                  |                      |                      | 2.0                           | 28.            | 17.            | 24.2           | .1083                       | 3.0             | 50.      | .90    | 596.     |                               |                | .79      |          |
| 2                |              |                              |                  |                      |                      | 2.1                           | 21.            | 0.             | 9.9            | .0505                       | 3.3             | 157.     | .89    | 439.     |                               |                | .07      |          |
| 3                |              |                              |                  |                      |                      | 2.1                           | 32.            | 5.             | 21.4           | .0989                       | 3.2             | 56.      | .79    | 500.     |                               |                | .06      |          |
| 4                | 0900         | 13.7                         |                  |                      |                      | 2.4                           | 14.            | 0.             | 8.7            | .0575                       | .7              | 104.     | .77    | 464.     |                               |                | .35      |          |
| 5                | 0900         | 17.2                         |                  |                      |                      | 2.7                           | 28.            | 15.            | 22.3           | .1122                       | 1.6             | 11.      | .82    | 519.     |                               |                | .17      |          |
| 6                | 0900         | 16.2                         | 3.1              | 16.4                 |                      | 2.4                           | 42.            | 27.            | 34.0           | .1767                       | 4.5             | 24.      | .83    | 582.     |                               |                | .54      |          |
| 7                | 0900         | 12.2                         | 2.9              | 12.8                 | .21                  | 2.8                           | 26.            | -5.            | 8.9            | .0446                       | 4.5             | 176.     | .78    | 374.     |                               |                | 0.00     |          |
| 8                | 0900         | 11.7                         | 2.8              | 12.5                 | .22                  | 2.9                           | 29.            | -4.            | 12.4           | .0626                       | 2.8             | 48.      | .81    | 533.     |                               |                | .44      |          |
| 9                |              |                              |                  |                      |                      | 3.0                           | 33.            | 27.            | 30.0           | .1530                       | 1.3             | 22.      | .77    | 587.     |                               |                | .03      |          |
| 10               |              |                              |                  |                      |                      | 3.2                           | 32.            | 19.            | 28.9           | .1441                       | 2.4             | 20.      | .80    | 575.     |                               |                | .12      |          |
| 11               | 0900         | 14.7                         | 3.4              | 15.7                 | .18                  | 3.2                           | 19.            | -3.            | 8.5            | .0534                       | 4.5             | 161.     | .89    | 434.     |                               |                | .02      |          |
| 12               | 0900         | 14.6                         | 3.5              | 15.5                 | .17                  | 3.3                           | 18.            | 1.             | 10.2           | .0619                       | 1.4             | 79.      | .77    | 510.     |                               |                | .37      |          |
| 13               | 0900         | 15.8                         | 4.0              | 16.7                 | .29                  | 3.8                           | 37.            | 16.            | 25.9           | .1132                       | 5.0             | 33.      | .73    | 490.     |                               |                | .21      |          |
| 14               | 0900         | 15.8                         | 3.5              | 16.6                 | .32                  | 3.8                           | 25.            | 9.             | 16.0           | .0809                       | 1.7             | 75.      | .77    | 491.     |                               |                | 0.00     |          |
| 15               | 0900         | 15.8                         | 3.7              | 16.3                 | .33                  | 4.2                           | 14.            | 2.             | 9.4            | .0617                       | 1.4             | 51.      | .80    | 489.     |                               |                | .58      |          |
| 16               |              |                              |                  |                      |                      | 4.9                           | 20.            | 3.             | 13.3           | .0742                       | 3.2             | 41.      | .90    | 540.     |                               |                | .52      |          |
| 17               |              |                              |                  |                      |                      | 4.9                           | 2.             | -3.            | -1.3           | .0322                       | 8.2             | 91.      | .89    | 429.     |                               |                | .03      |          |
| 18               | 1145         | 22.2                         | 4.5              | 23.0                 | .14                  | 4.9                           | 21.            | -9.            | 10.9           | .0609                       | 2.4             | 44.      | .84    | 531.     |                               |                | .04      |          |
| 19               | 0900         | 23.1                         | 4.7              | 24.0                 | .07                  | 4.9                           | 29.            | 13.            | 20.5           | .0983                       | 1.1             | 45.      | .84    | 597.     |                               |                | .15      |          |
| 20               | 0900         | 23.5                         | 5.0              | 23.9                 | .10                  | 5.0                           | 28.            | 18.            | 22.2           | .1047                       | .9              | 50.      | .84    | 606.     |                               |                | .04      |          |
| 21               | 0900         | 23.5                         | 5.0              | 23.8                 | .13                  | 5.2                           | 27.            | 13.            | 18.5           | .0921                       | 1.6             | 25.      | .76    | 570.     |                               |                | .21      |          |
| 22               | 0900         | 25.7                         | 5.5              | 26.0                 | .13                  | 5.5                           | 34.            | 28.            | 30.6           | .1540                       | 1.4             | 43.      | .88    | 585.     |                               |                | .27      |          |
| 23               |              |                              |                  |                      |                      | 5.6                           | 32.            | 27.            | 30.1           | .1551                       | .5              | 41.      | .80    | 592.     |                               |                | .03      |          |
| 24               |              |                              |                  |                      |                      | 5.6                           | 33.            | 31.            | 32.2           | .1649                       | 1.2             | 47.      | .81    | 647.     |                               |                | 0.00     |          |
| 25               |              |                              |                  |                      |                      | 5.7                           | 32.            | 29.            | 31.3           | .1596                       | 1.7             | 34.      | .79    | 641.     |                               |                | 0.00     |          |
| 26               | 1200         | 23.2                         | 5.5              | 23.1                 | .17                  | 5.8                           | 30.            | 28.            | 29.4           | .1491                       | 2.7             | 22.      | .73    | 637.     |                               |                | .12      |          |
| 27               | 0900         | 23.2                         | 5.6              | 23.5                 | .19                  | 5.8                           | 30.            | 10.            | 20.2           | .0964                       | 3.4             | 57.      | .84    | 549.     |                               |                | .09      |          |
| 28               |              |                              |                  |                      |                      | 5.8                           | 20.            | 12.            | 15.5           | .0767                       | 2.2             | 59.      | .90    | 553.     |                               |                | .07      |          |
| 29               | 0900         | 22.5                         | 5.7              | 23.2                 | .18                  | 5.8                           | 11.            | 1.             | 5.5            | .0433                       | 1.9             | 151.     | .89    | 472.     |                               |                | 0.00     |          |
| 30               |              |                              |                  |                      |                      | 6.2                           | 21.            | 7.             | 12.6           | .0667                       | .5              | 26.      | .90    | 534.     |                               |                | .59      |          |
| 31               |              |                              |                  |                      |                      | 6.5                           | 37.            | 22.            | 29.2           | .1473                       | 2.6             | 28.      | .90    | 490.     |                               |                | .44      |          |
| MONTHLY AVERAGE= |              |                              |                  |                      |                      |                               |                |                |                |                             |                 |          |        |          | 553.                          | TOTAL=         | 6.35     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW Q2=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VERMONT-- 1/73

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                | 0900         | 24.0                         | 6.3              | 24.6                  | .22                  | 6.6                           | 37.            | 29.            | 34.2           | .1627              | 3.0             | 39.      | .77          | 566.     | 653.                          | 30.9           | .22      |          |
| 2                | 0900         | 24.6                         | 6.5              | 25.3                  | .07                  | 6.7                           | 28.            | 15.            | 19.6           | .0733              | 5.5             | 108.     | .77          | 465.     | 522.                          | 19.7           | .01      |          |
| 3                | 0900         | 24.6                         | 6.5              | 25.3                  | .19                  | 6.7                           | 20.            | 5.             | 13.3           | .0639              | 3.0             | 166.     | .82          | 425.     | 409.                          | 11.8           | .04      |          |
| 4                | 0900         | 23.5                         | 6.5              | 23.8                  | .15                  | 6.7                           | 32.            | 13.            | 24.4           | .1124              | 3.8             | 17.      | .90          | 553.     | 609.                          | 22.4           | .25      |          |
| 5                | 0900         | 24.3                         | 6.6              | 25.5                  |                      | 6.7                           | 31.            | 13.            | 24.8           | .1062              | 4.3             | 79.      | .86          | 516.     | 580.                          | 24.1           | .29      |          |
| 6                |              |                              |                  |                       |                      | 6.7                           | 11.            | -10.           | -5.5           | .0245              | 8.4             | 137.     | .82          | 332.     | 382.                          | -5.4           | .04      |          |
| 7                |              |                              |                  |                       |                      | 6.7                           | -6.            | -16.           | -10.9          | .0166              | 6.6             | 187.     | .80          | 225.     | 286.                          | -12.5          | 0.00     |          |
| 8                |              |                              |                  |                       |                      | 6.7                           | -5.            | -24.           | -16.2          | .0121              | 3.4             | 207.     | .74          | 213.     | 238.                          | -19.0          | 0.00     |          |
| 9                |              |                              |                  |                       |                      | 6.8                           | 10.            | -16.           | -4.3           | .0221              | 2.1             | 88.      | .78          | 307.     | 326.                          | -7.5           | .02      |          |
| 10               |              |                              |                  |                       |                      | 6.7                           | 16.            | -3.            | 8.5            | .0487              | 1.4             | 88.      | .90          | 394.     | 499.                          | 8.0            | .14      |          |
| 11               | 1045         | 25.3                         | 6.5              | 26.7                  | .04                  | 6.7                           | 17.            | -4.            | 7.8            | .0447              | 1.9             | 111.     | .86          | 402.     | 475.                          | 5.8            | .06      |          |
| 12               |              |                              |                  |                       |                      | 6.7                           | 5.             | -8.            | -1.2           | .0292              | 3.8             | 159.     | .78          | 319.     | 381.                          | -3.4           | .07      |          |
| 13               |              |                              |                  |                       |                      | 6.7                           | 13.            | -18.           | -6             | .0275              | 1.4             | 174.     | .89          | 342.     | 364.                          | -6.0           | 0.00     |          |
| 14               |              |                              |                  |                       |                      | 6.7                           | 24.            | 6.             | 17.1           | .0714              | 1.2             | 94.      | .82          | 502.     | 536.                          | 15.9           | .06      |          |
| 15               | 0900         | 25.6                         | 6.8              | 26.3                  | .12                  | 6.7                           | 28.            | 21.            | 25.5           | .1187              | 2.2             | 70.      | .86          | 548.     | 596.                          | 24.5           | .07      |          |
| 16               | 0900         | 24.8                         | 6.9              | 26.0                  | .13                  | 6.7                           | 37.            | 23.            | 29.0           | .1196              | 2.6             | 169.     | .82          | 506.     | 511.                          | 25.7           | .01      |          |
| 17               | 0900         | 24.7                         | 7.1              | 25.5                  | .14                  | 6.7                           | 43.            | 21.            | 32.7           | .1431              | 1.4             | 142.     | .77          | 558.     | 568.                          | 25.4           | 0.00     |          |
| 18               | 0900         | 22.7                         | 6.7              | 23.6                  | .20                  | 6.7                           | 40.            | 34.            | 35.7           | .1779              | 1.0             | 32.      | .72          | 612.     | 666.                          | 31.8           | 0.00     |          |
| 19               | 0900         | 21.6                         | 6.7              | 22.4                  | .27                  | 6.7                           | 46.            | 28.            | 40.3           | .1761              | 2.8             | 170.     | .73          | 532.     | 575.                          | 29.6           | .21      |          |
| 20               |              |                              |                  |                       |                      | 7.0                           | 43.            | 8.             | 23.7           | .1071              | 10.7            | 67.      | .85          | 442.     | 590.                          | 22.0           | .87      |          |
| 21               |              |                              |                  |                       |                      | 6.4                           | 19.            | 2.             | 8.1            | .0506              | 2.3             | 244.     | .68          | 312.     | 328.                          | 2.9            | 0.00     |          |
| 22               | 0900         | 18.7                         | 6.8              | 20.2                  | .31                  | 6.9                           | 39.            | 8.             | 24.6           | .1019              | 2.2             | 87.      | .79          | 486.     | 584.                          | 18.4           | .42      |          |
| 23               | 1200         | 18.2                         | 6.8              | 19.2                  | .31                  | 7.0                           | 40.            | 33.            | 35.7           | .1764              | 3.2             | 66.      | .70          | 536.     | 654.                          | 31.7           | .28      |          |
| 24               | 0900         | 18.2                         | 6.5              | 19.0                  | .36                  | 7.0                           | 32.            | 12.            | 25.2           | .1100              | 4.9             | 62.      | .81          | 512.     | 602.                          | 25.1           | .07      |          |
| 25               | 1030         | 18.3                         | 6.8              | 19.0                  | .31                  | 7.2                           | 28.            | 8.             | 17.7           | .0573              | 3.4             | 174.     | .75          | 430.     | 474.                          | 15.3           | 0.00     |          |
| 26               | 0900         | 18.3                         | 6.5              | 18.9                  | .33                  | 7.2                           | 29.            | 20.            | 25.0           | .1243              | 2.2             | 62.      | .73          | 538.     | 601.                          | 22.8           | 0.00     |          |
| 27               |              |                              |                  |                       |                      | 7.2                           | 36.            | 18.            | 27.1           | .1068              | .8              | 173.     | .66          | 465.     | 526.                          | 19.0           | 0.00     |          |
| 28               |              |                              |                  |                       |                      | 7.2                           | 28.            | 21.            | 24.9           | .1023              | 2.6             | 82.      | .77          | 535.     | 592.                          | 21.3           | .14      |          |
| 29               | 0900         | 22.5                         |                  |                       | .16                  | 7.8                           | 25.            | -3.            | 12.8           | .0706              | 5.3             | 47.      | .89          | 490.     | 548.                          | 20.0           | .55      |          |
| 30               | 0900         | 24.1                         | 7.3              | 25.0                  | .12                  | 8.1                           | 15.            | -18.           | 1.0            | .0339              | 3.5             | 157.     | .85          | 391.     | 431.                          | 11.6           | .16      |          |
| 31               | 0900         | 25.1                         | 7.6              | 25.6                  | .09                  | 7.4                           | -1.            | -24.           | -15.9          | .0116              | 4.0             | 261.     | .83          | 270.     | 248.                          | -10.7          | .03      |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |              |          |                               |                |          | TOTAL=   |
| 25.              |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |              |          |                               |                |          | 4.01     |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QO=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VFRMONT-- 2/73

| DAY              | OBS.<br>TIME | DERTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MRH | QI<br>LY | ALBEDO | ANDERSON<br>BAKER |      | AVE<br>TS<br>F | PX<br>IN | RO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|-------------------|------|----------------|----------|----------|
|                  |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |        | QA<br>LY          | LY   |                |          |          |
| 1                | 1020         | 24.7                         | 7.4              | 25.2                  | .09                  |                               | 14.            | -21.           | -1.3           | .0274              | 2.4             | 86.      | .83    | 490.              | 473. | -2.1           | 0.00     |          |
| 2                | 0900         | 24.7                         |                  |                       | .13                  |                               | 44.            | 15.            | 31.0           | .1554              | 3.7             | 26.      | .77    | 583.              | 643. | 27.2           | .58      |          |
| 3                |              |                              |                  |                       |                      |                               | 45.            | 18.            | 33.2           | .1570              | 4.6             | 29.      | .69    | 629.              | 655. | 28.1           | .04      |          |
| 4                |              |                              |                  |                       |                      |                               | 31.            | 18.            | 25.1           | .1039              | 4.0             | 197.     | .80    | 580.              | 518. | 23.8           | .11      |          |
| 5                | 0900         | 20.8                         | 7.3              | 21.4                  | .19                  |                               | 31.            | 0.             | 15.4           | .0554              | 4.6             | 275.     | .77    | 409.              | 387. | 9.4            | .07      |          |
| 6                | 1015         | 20.8                         | 7.5              | 21.3                  | .22                  |                               | 24.            | -2.            | 12.7           | .0458              | 1.6             | 302.     | .68    | 398.              | 345. | 2.3            | 0.00     |          |
| 7                | 0900         | 20.3                         | 7.1              | 20.4                  | .21                  |                               | 31.            | 18.            | 25.8           | .0837              | 3.2             | 207.     | .76    | 586.              | 518. | 23.2           | 0.00     |          |
| 8                | 0900         | 20.1                         | 7.0              | 21.0                  | .22                  |                               | 30.            | 14.            | 26.1           | .1112              | 3.8             | 53.      | .75    | 623.              | 613. | 25.0           | .14      |          |
| 9                | 0900         | 22.1                         | 7.1              | 21.8                  | .12                  |                               | 12.            | -14.           | 1.3            | .0330              | 4.8             | 292.     | .78    | 342.              | 326. | 1.6            | .02      |          |
| 10               |              |                              |                  |                       |                      |                               | 17.            | -15.           | .6             | .0293              | 2.5             | 298.     | .71    | 341.              | 320. | -6.0           | 0.00     |          |
| 11               |              |                              |                  |                       |                      |                               | 7.             | -7.            | -.4            | .0214              | 4.3             | 311.     | .77    | 292.              | 304. | -6.6           | 0.00     |          |
| 12               | 0900         | 21.3                         | 7.5              | 21.6                  | .15                  |                               | 5.             | -10.           | .4             | .0283              | 5.2             | 161.     | .79    | 438.              | 449. | -1.6           | 0.00     |          |
| 13               | 0900         | 23.6                         | 7.5              | 22.6                  | .03                  |                               | 17.            | 3.             | 10.7           | .0462              | 6.4             | 155.     | .83    | 499.              | 499. | 13.5           | .11      |          |
| 14               | 0900         | 23.8                         | 7.4              | 23.7                  | .08                  |                               | 32.            | 15.            | 23.2           | .0410              | 2.6             | 263.     | .81    | 471.              | 467. | 18.0           | 0.00     |          |
| 15               | 0900         | 28.2                         | 8.1              | 28.8                  | .09                  |                               | 29.            | 18.            | 26.3           | .1073              | 2.5             | 50.      | .90    | 626.              | 616. | 25.3           | .55      |          |
| 16               | 0900         | 27.8                         | 8.0              | 28.5                  | .10                  |                               | 17.            | -8.            | 3.8            | .0380              | 7.3             | 200.     | .83    | 483.              | 443. | 5.0            | .05      |          |
| 17               |              |                              |                  |                       |                      |                               | -3.            | -17.           | -10.0          | .0154              | 6.9             | 351.     | .77    | 268.              | 258. | -11.9          | 0.00     |          |
| 18               |              |                              |                  |                       |                      |                               | 13.            | -9.            | 3.4            | .0319              | 3.3             | 216.     | .81    | 441.              | 433. | -3.5           | 0.00     |          |
| 19               |              |                              |                  |                       |                      |                               | 26.            | 1.             | 18.0           | .0726              | 2.4             | 151.     | .81    | 544.              | 541. | 15.7           | 0.00     |          |
| 20               | 1030         | 26.6                         | 7.9              | 26.7                  | .13                  |                               | 35.            | 25.            | 30.2           | .1230              | 2.2             | 95.      | .84    | 630.              | 625. | 27.0           | .01      |          |
| 21               | 0900         | 26.5                         | 8.0              | 26.8                  | .12                  |                               | 32.            | 27.            | 30.0           | .1476              | .9              | 66.      | .85    | 631.              | 633. | 28.2           | .20      |          |
| 22               | 0900         | 27.8                         | 8.1              | 27.5                  | .10                  |                               | 32.            | 19.            | 26.1           | .1230              | 5.0             | 124.     | .84    | 590.              | 595. | 26.4           | .10      |          |
| 23               | 0900         | 28.0                         | 8.3              | 28.0                  | .17                  |                               | 20.            | 15.            | 17.5           | .0780              | 7.3             | 167.     | .83    | 544.              | 534. | 16.9           | .13      |          |
| 24               |              |                              |                  |                       |                      |                               | 18.            | 9.             | 13.5           | .0490              | 6.4             | 362.     | .78    | 382.              | 361. | 10.7           | 0.00     |          |
| 25               |              |                              |                  |                       |                      |                               | 11.            | -4.            | 5.1            | .0330              | 3.8             | 366.     | .78    | 365.              | 326. | 2.1            | 0.00     |          |
| 26               | 0900         | 26.7                         | 8.3              | 26.5                  | .13                  |                               | 16.            | -7.            | 4.7            | .0249              | 3.8             | 372.     | .78    | 360.              | 321. | -1.8           | 0.00     |          |
| 27               | 0900         | 26.7                         | 8.4              | 26.5                  | .14                  |                               | 15.            | -18.           | -1.2           | .0188              | 1.7             | 373.     | .77    | 366.              | 302. | -8.4           | 0.00     |          |
| 28               | 1100         | 26.3                         | 8.3              | 26.3                  | .18                  |                               | 23.            | -5.            | 10.5           | .0286              | 2.6             | 371.     | .77    | 409.              | 354. | 1.3            | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               | 22.            | 3.             | 13.6           | 8.2                | 3.9             | 211.     | .78    | 476.              | 459. | TOTAL=         | 2.11     |          |

THE SYMBOLS USED ARE AS FOLLOWS:

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIP) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION RX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VFRMONT-- 3/77

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COUPSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LV | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                | 0900         | 26.6                         | 8.1              | 26.4                  | .17                  |                               | 31.            | 11.            | 23.8           | .0767              | 1.7             | 65.      | .86          | 619.     | 603.                          | M              | .05      | M        |
| 2                | 0900         | 26.6                         | 8.2              | 27.0                  | .17                  |                               | 33.            | 24.            | 31.5           | .1594              | .3              | 51.      | .84          | 655.     | 645.                          | M              | .06      | M        |
| 3                |              |                              |                  |                       |                      |                               | 32.            | 28.            | 29.1           | .1394              | 4.1             | 114.     | .78          | 619.     | 619.                          | M              | 0.00     | M        |
| 4                |              |                              |                  |                       |                      |                               | 41.            | 29.            | 35.5           | .1862              | 3.0             | 90.      | .73          | 626.     | 659.                          | M              | .13      | M        |
| 5                | 0900         | 24.3                         | 8.4              | 24.4                  | .30                  |                               | 42.            | 27.            | 32.6           | .1249              | 2.4             | 399.     | .68          | 546.     | 463.                          | M              | 0.00     | M        |
| 6                | 0900         | 23.1                         | 8.3              | 23.9                  | .29                  |                               | 33.            | 25.            | 31.1           | .1116              | 3.7             | 75.      | .73          | 652.     | 639.                          | M              | 0.00     | M        |
| 7                | 0900         | 23.2                         | 8.2              | 23.2                  | .30                  |                               | 39.            | 30.            | 34.7           | .1749              | 4.2             | 117.     | .72          | 697.     | 649.                          | M              | 0.00     | M        |
| 8                | 0900         | 20.6                         | 7.7              | 20.3                  | .30                  |                               | 46.            | 32.            | 39.0           | .2105              | 2.4             | 177.     | .68          | 602.     | 653.                          | M              | .27      | M        |
| 9                | 0900         | 18.7                         | 7.6              | 19.3                  | .35                  |                               | 39.            | 26.            | 32.5           | .1340              | 2.0             | 274.     | .67          | 576.     | 570.                          | M              | 0.00     | .13      |
| 10               |              |                              |                  |                       |                      |                               | 34.            | 29.            | 31.9           | .1152              | 3.3             | 65.      | .75          | 629.     | 645.                          | M              | .01      | .05      |
| 11               |              |                              |                  |                       |                      |                               | 38.            | 30.            | 34.2           | .1591              | 4.4             | 185.     | .68          | 650.     | 626.                          | M              | .16      | .41      |
| 12               | 0900         | 16.1                         | 7.3              | 16.7                  | .41                  |                               | 52.            | 34.            | 42.5           | .2252              | 3.7             | 177.     | .66          | 651.     | 675.                          | M              | .14      | 1.49     |
| 13               | 0900         | 15.1                         | 6.2              | 14.9                  | .40                  |                               | 39.            | 27.            | 32.5           | .1249              | 4.2             | 419.     | .63          | 546.     | 474.                          | M              | .01      | .37      |
| 14               | 0900         | 14.1                         | 5.5              | 14.6                  | .34                  |                               | 39.            | 26.            | 31.5           | .1104              | 1.8             | 219.     | .64          | 601.     | 600.                          | M              | 0.00     | .12      |
| 15               | 0900         | 13.8                         | 5.5              | 13.9                  | .36                  |                               | 37.            | 28.            | 34.3           | .1312              | 3.6             | 72.      | .69          | 660.     | 658.                          | M              | .16      | .18      |
| 16               | 0900         | 12.3                         | 5.7              | 13.4                  | .40                  |                               | 46.            | 34.            | 41.0           | .1957              | 2.6             | 150.     | .61          | 681.     | 677.                          | M              | .02      | .83      |
| 17               | 1545         | 10.0                         |                  |                       | .40                  |                               | 42.            | 34.            | 38.5           | .2057              | 2.2             | 21.      | .76          | 680.     | 685.                          | M              | 1.26     | 1.90     |
| 18               |              |                              |                  |                       |                      |                               | 37.            | 27.            | 29.5           | .1328              | 5.2             | 236.     | .79          | 623.     | 587.                          | M              | .15      | .23      |
| 19               | 0900         | 11.0                         | 3.9              | 11.8                  | .15                  |                               | 30.            | 26.            | 28.1           | .1287              | 6.3             | 127.     | .87          | 613.     | 616.                          | M              | .21      | .04      |
| 20               | 0900         | 11.0                         | 4.2              | 13.0                  | .14                  |                               | 25.            | 16.            | 21.5           | .0926              | 4.9             | 216.     | .84          | 562.     | 556.                          | M              | .08      | .03      |
| 21               | 0900         | 11.5                         | 4.2              | 12.8                  | .12                  |                               | 27.            | 18.            | 23.2           | .0903              | 2.5             | 168.     | .84          | 579.     | 581.                          | M              | 0.00     | .03      |
| 22               | 0900         | 11.3                         | 4.5              | 11.7                  | .19                  |                               | 32.            | 23.            | 26.5           | .0868              | 4.5             | 347.     | .80          | 545.     | 519.                          | M              | 0.00     | .03      |
| 23               | 0900         | 10.7                         | 4.2              | 11.4                  | .19                  |                               | 38.            | 22.            | 29.8           | .0670              | 5.4             | 513.     | .76          | 466.     | 416.                          | M              | 0.00     | .03      |
| 24               |              |                              |                  |                       |                      |                               | 45.            | 23.            | 35.1           | .0832              | 4.5             | 403.     | .74          | 521.     | 527.                          | M              | 0.00     | .00      |
| 25               |              |                              |                  |                       |                      |                               | 50.            | 26.            | 38.5           | .1319              | 2.8             | 328.     | .67          | 621.     | 595.                          | M              | 0.00     | -        |
| 26               | 0900         | 8.6                          | 4.0              | 9.6                   | .39                  |                               | 44.            | 31.            | 37.5           | .1564              | 3.4             | 194.     | .62          | 620.     | 649.                          | M              | .07      | .88      |
| 27               | 0900         | 8.2                          | 3.7              | 9.0                   | .44                  |                               | 34.            | 21.            | 28.5           | .0628              | 4.6             | 528.     | .59          | 461.     | 410.                          | M              | 0.00     | .19      |
| 28               | 0900         | 7.8                          | 3.4              | 8.7                   | .38                  |                               | 45.            | 18.            | 31.7           | .0709              | 2.7             | 521.     | .60          | 501.     | 433.                          | M              | 0.00     | .23      |
| 29               | 0900         | 7.3                          | 3.2              | 8.2                   | .33                  |                               | 47.            | 28.            | 37.0           | .0882              | 3.5             | 365.     | .59          | 577.     | 571.                          | M              | 0.00     | .29      |
| 30               | 0900         | 6.1                          | 2.8              | 7.0                   | .30                  |                               | 55.            | 28.            | 39.7           | .1448              | 1.9             | 443.     | .55          | 599.     | 540.                          | M              | 0.00     | .71      |
| 31               |              |                              |                  |                       |                      |                               | 56.            | 33.            | 43.4           | .1865              | 2.0             | 424.     | .52          | 654.     | 575.                          | M              | 0.00     | 1.00     |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               | 40.            | 26.            | 33.1           | 24.5               | 3.4             | 241.     | .68          | 602.     | 584.                          | TOTAL=         | 2.78     | M        |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA RANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOP PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 4/77

| DAY              | OBS.<br>TIME | DFPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COURSE<br>WE<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE<br>AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | Q <sup>A</sup><br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------------|----------------------|----------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------------------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                            |                      |                                  | 49.            | 38.            | 42.0           | .2151              | 2.7             | 138.     | .35          | 692.                 | 691.                          | M              | .29      | 1.24     |
| 2                | 1030         | 0.0                          | 0.0                        | 0.0                  | 37.                              | 37.            | 31.            | 33.8           | .1588              | 5.1             | 90.      | .39          | 643.                 | 654.                          | 31.6           | .48      | .23      |
| 3                | 0900         | 4.5                          | .4                         | 4.4                  | 36.                              | 36.            | 30.            | 32.6           | .1599              | 1.0             | 168.     | .81          | 652.                 | 634.                          | 30.7           | .20      | .03      |
| 4                | 0900         | 1.5                          |                            |                      | 41.                              | 30.            | 30.            | 34.6           | .1726              | 1.9             | 140.     | .66          | 661.                 | 651.                          | 31.4           | .90      | .39      |
| 5                | 1200         | 11.6                         | 1.3                        | 11.5                 | 32.                              | 28.            | 28.            | 30.3           | .1517              | 4.8             | 113.     | .87          | 632.                 | 633.                          | M              | .53      | .06      |
| 6                | 0900         | 9.7                          | 1.5                        | 9.5                  | 35.                              | 27.            | 27.            | 32.1           | .1287              | 6.1             | 302.     | .82          | 578.                 | 590.                          | 27.1           | 0.00     | .05      |
| 7                |              |                              |                            | .16                  | 36.                              | 25.            | 25.            | 30.6           | .1045              | 5.3             | 583.     | .77          | 490.                 | 424.                          | 22.4           | 0.00     | .04      |
| 8                |              |                              |                            |                      | 36.                              | 21.            | 21.            | 28.0           | .0799              | 3.2             | 436.     | .78          | 513.                 | 505.                          | 15.5           | 0.00     | .02      |
| 9                | 0900         | 6.5                          |                            | .27                  | 38.                              | 15.            | 26.7           | .0619          | .0799              | 2.6             | 560.     | .74          | 494.                 | 419.                          | 15.1           | 0.00     | .00      |
| 10               | 0900         | 10.6                         |                            | .12                  | 31.                              | 25.            | 29.0           | .1152          | .0994              | 2.9             | 50.      | .90          | 620.                 | 633.                          | 26.1           | .79      | 0.00     |
| 11               | 0900         | 13.1                         | 2.4                        | 13.5                 | 24.                              | 19.            | 21.3           | .0920          | .0920              | 4.7             | 328.     | .87          | 590.                 | 530.                          | 20.7           | .21      | 0.00     |
| 12               |              |                              |                            | .08                  | 27.                              | 17.            | 21.2           | .0717          | .0717              | 4.9             | 347.     | .85          | 535.                 | 522.                          | 15.1           | .03      | 0.00     |
| 13               | 1200         | 12.2                         | 2.3                        | 13.0                 | 28.                              | 12.            | 20.2           | .0684          | .0684              | 5.5             | 572.     | .81          | 485.                 | 395.                          | 16.9           | 0.00     | .00      |
| 14               |              |                              |                            | .17                  | 42.                              | 13.            | 29.2           | .0726          | .0726              | 3.3             | 603.     | .77          | 499.                 | 415.                          | 19.2           | 0.00     | 0.00     |
| 15               |              |                              |                            |                      | 53.                              | 25.            | 38.5           | .0994          | .0994              | 2.9             | 578.     | .71          | 553.                 | 478.                          | 24.8           | 0.00     | .25      |
| 16               | 1015         | 6.2                          | 2.1                        | 6.2                  | 68.                              | 33.            | 48.8           | .1316          | .1316              | 3.4             | 581.     | .66          | 615.                 | 528.                          | 29.1           | 0.00     | .94      |
| 17               | 0900         | 0.0                          |                            |                      | 62.                              | 37.            | 50.9           | .1646          | .1646              | 3.8             | 515.     | .36          | 662.                 | 589.                          | 31.9           | 0.00     | 1.42     |
| 18               |              |                              |                            |                      | 66.                              | 36.            | 49.1           | .1548          | .1548              | 2.9             | 590.     | .18          | 630.                 | 530.                          | M              | 0.00     | M        |
| 19               |              |                              |                            |                      | 62.                              | 39.            | 49.8           | .1657          | .1657              | 3.5             | 571.     | M            | 619.                 | 551.                          | M              | 0.00     | M        |
| 20               |              |                              |                            |                      | 62.                              | 30.            | 44.2           | .1326          | .1326              | 1.9             | 625.     | M            | 581.                 | 487.                          | M              | 0.00     | M        |
| 21               |              |                              |                            |                      | 68.                              | 37.            | 50.6           | .2040          | .2040              | 1.9             | 403.     | M            | 718.                 | 658.                          | M              | 0.00     | M        |
| 22               |              |                              |                            |                      | 73.                              | 47.            | 57.8           | .3683          | .3683              | 2.3             | 241.     | M            | 783.                 | 765.                          | M              | .62      | M        |
| 23               |              |                              |                            |                      | 62.                              | 40.            | 53.6           | .2323          | .2323              | 3.8             | 471.     | M            | 677.                 | 643.                          | M              | 0.00     | M        |
| 24               |              |                              |                            |                      | 55.                              | 39.            | 47.9           | .2085          | .2085              | 3.0             | 253.     | M            | 680.                 | 703.                          | M              | 0.00     | M        |
| 25               |              |                              |                            |                      | 54.                              | 39.            | 45.7           | .1616          | .1616              | 4.2             | 554.     | M            | 638.                 | 554.                          | M              | 0.00     | M        |
| 26               |              |                              |                            |                      | 52.                              | 35.            | 44.5           | .1627          | .1627              | 1.8             | 241.     | M            | 660.                 | 687.                          | M              | 0.00     | M        |
| 27               |              |                              |                            |                      | 45.                              | 39.            | 41.8           | .1877          | .1877              | 3.9             | 93.      | M            | 672.                 | 699.                          | M              | .25      | M        |
| 28               |              |                              |                            |                      | 55.                              | 41.            | 48.7           | .2824          | .2824              | 2.5             | 126.     | M            | 734.                 | 735.                          | M              | .49      | M        |
| 29               |              |                              |                            |                      | 45.                              | 32.            | 36.5           | .1747          | .1747              | 7.3             | 98.      | M            | 671.                 | 669.                          | M              | .20      | M        |
| 30               |              |                              |                            |                      | 41.                              | 31.            | 34.5           | .1602          | .1602              | 3.1             | 214.     | M            | 634.                 | 641.                          | M              | .03      | M        |
| MONTHLY AVERAGE= |              |                              |                            |                      |                                  | 47.            | 30.            | 38.5           | 28.2               | 3.5             | 353.     | M            | 620.                 | 587.                          | TOTAL=         | 5.02     | M        |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(ATR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PA=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARPS SNOW RESEARCH STATION, DANVILLE, VERMONT--- 5/77

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | Q <sup>A</sup><br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------------------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                  |                       |                      |                               | 57.            | 30.            | 45.6           | .1977              | 1.9             | 500.     |              |                      | 595.                          |                | 0.00     |          |
| 2                |              |                              |                  |                       |                      |                               | 66.            | 46.            | 55.6           | .3024              | 3.5             | 347.     |              |                      | 721.                          |                | .09      |          |
| 3                |              |                              |                  |                       |                      |                               | 63.            | 44.            | 54.2           | .3287              | 3.6             | 223.     |              |                      | 751.                          |                | .55      |          |
| 4                |              |                              |                  |                       |                      |                               | 47.            | 38.            | 42.1           | .1797              | 2.4             | 207.     |              |                      | 684.                          |                | 0.00     |          |
| 5                |              |                              |                  |                       |                      |                               | 41.            | 36.            | 38.4           | .1649              | 3.6             | 199.     |              |                      | 665.                          |                | 0.00     |          |
| 6                |              |                              |                  |                       |                      |                               | 46.            | 35.            | 41.0           | .1770              | 4.1             | 266.     |              |                      | 665.                          |                | .07      |          |
| 7                |              |                              |                  |                       |                      |                               | 59.            | 30.            | 45.0           | .1423              | 2.7             | 692.     |              |                      | 491.                          |                | 0.00     |          |
| 8                |              |                              |                  |                       |                      |                               | 64.            | 34.            | 51.4           | .2044              | 2.9             | 574.     |              |                      | 593.                          |                | 0.00     |          |
| 9                |              |                              |                  |                       |                      |                               | 49.            | 43.            | 46.6           | .2679              | 3.3             | 25.      |              |                      | 731.                          |                | .47      |          |
| 10               |              |                              |                  |                       |                      |                               | 67.            | 46.            | 54.8           | .3371              | 2.5             | 330.     |              |                      | 727.                          |                | .04      |          |
| 11               |              |                              |                  |                       |                      |                               | 56.            | 46.            | 50.0           | .2986              | 3.3             | 202.     |              |                      | 731.                          |                | .29      |          |
| 12               |              |                              |                  |                       |                      |                               | 54.            | 40.            | 46.0           | .2327              | 3.2             | 291.     |              |                      | 688.                          |                | .31      |          |
| 13               |              |                              |                  |                       |                      |                               | 47.            | 39.            | 42.8           | .2030              | 2.8             | 225.     |              |                      | 686.                          |                | .05      |          |
| 14               |              |                              |                  |                       |                      |                               | 47.            | 33.            | 41.3           | .1849              | 2.9             | 222.     |              |                      | 678.                          |                | 0.00     |          |
| 15               |              |                              |                  |                       |                      |                               | 58.            | 32.            | 45.5           | .2151              | 2.7             | 395.     |              |                      | 652.                          |                | .24      |          |
| 16               |              |                              |                  |                       |                      |                               | 56.            | 40.            | 46.8           | .1890              | 4.1             | 587.     |              |                      | 572.                          |                | .19      |          |
| 17               |              |                              |                  |                       |                      |                               | 60.            | 41.            | 50.7           | .1977              | 4.3             | 607.     |              |                      | 581.                          |                | 0.00     |          |
| 18               |              |                              |                  |                       |                      |                               | 45.            | 39.            | 41.7           | .2078              | 2.3             | 111.     |              |                      | 698.                          |                | .21      |          |
| 19               |              |                              |                  |                       |                      |                               | 41.            | 37.            | 39.7           | .2040              | 3.9             | 141.     |              |                      | 683.                          |                | .28      |          |
| 20               |              |                              |                  |                       |                      |                               | 61.            | 40.            | 51.2           | .2459              | 2.0             | 384.     |              |                      | 691.                          |                | .05      |          |
| 21               |              |                              |                  |                       |                      |                               | 48.            | 42.            | 45.7           | .2603              | 5.3             | 127.     |              |                      | 719.                          |                | 1.69     |          |
| 22               |              |                              |                  |                       |                      |                               | 46.            | 39.            | 42.8           | .2331              | 4.3             | 124.     |              |                      | 703.                          |                | .19      |          |
| 23               |              |                              |                  |                       |                      |                               | 60.            | 35.            | 49.0           | .2158              | 2.3             | 513.     |              |                      | 627.                          |                | 0.00     |          |
| 24               |              |                              |                  |                       |                      |                               | 63.            | 38.            | 51.5           | .2249              | 2.2             | 516.     |              |                      | 640.                          |                | 0.00     |          |
| 25               |              |                              |                  |                       |                      |                               | 57.            | 42.            | 49.4           | .2549              | 2.3             | 333.     |              |                      | 699.                          |                | 0.00     |          |
| 26               |              |                              |                  |                       |                      |                               | 57.            | 42.            | 49.6           | .2451              | 1.5             | 300.     |              |                      | 709.                          |                | 0.00     |          |
| 27               |              |                              |                  |                       |                      |                               | 63.            | 42.            | 52.6           | .2496              | 2.8             | 420.     |              |                      | 688.                          |                | 0.00     |          |
| 28               |              |                              |                  |                       |                      |                               | 54.            | 44.            | 47.8           | .2806              | 3.6             | 58.      |              |                      | 737.                          |                | .54      |          |
| 29               |              |                              |                  |                       |                      |                               | 65.            | 51.            | 57.4           | .3717              | 2.6             | 262.     |              |                      | 765.                          |                | .15      |          |
| 30               |              |                              |                  |                       |                      |                               | 65.            | 50.            | 56.4           | .3236              | 1.9             | 365.     |              |                      | 731.                          |                | 0.00     |          |
| 31               |              |                              |                  |                       |                      |                               | 63.            | 50.            | 55.5           | .3543              | 2.3             | 292.     |              |                      | 747.                          |                | .84      |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               | 56.            | 40.            | 48.0           | 39.4               | 3.0             | 317.     |              |                      | 679.                          | TOTAL=         | 6.25     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 6/73

| DAY              | OBS. TIME | DEPTH SNOW STAKE IN | SNOW WE COUPE IN | SNOW SUR. DEN. | PILLLOW WE AT 2400 IN | MAX TA F | MIN TA F | AVE TA F | AVE EA IN.HG | AVE U MPH | OI LY | ALBEDO LY | OA LY | ANDERSON BAKER OA LY | AVE TS F | PX IN  | PO IN |
|------------------|-----------|---------------------|------------------|----------------|-----------------------|----------|----------|----------|--------------|-----------|-------|-----------|-------|----------------------|----------|--------|-------|
| 1                |           |                     |                  |                |                       | 61.      | 45.      | 53.9     | .2902        | 3.3       | 282.  |           |       | 740.                 |          | .35    |       |
| 2                |           |                     |                  |                |                       | 51.      | 34.      | 42.4     | .1714        | 4.0       | 706.  |           |       | 496.                 |          | 0.00   |       |
| 3                |           |                     |                  |                |                       | 64.      | 35.      | 50.3     | .1868        | 3.2       | 757.  |           |       | 519.                 |          | 0.00   |       |
| 4                |           |                     |                  |                |                       | 58.      | 43.      | 52.0     | .3293        | .7        | 140.  |           |       | 754.                 |          | .25    |       |
| 5                |           |                     |                  |                |                       | 69.      | 55.      | 60.8     | .4506        | 2.2       | 281.  |           |       | 783.                 |          | .02    |       |
| 6                |           |                     |                  |                |                       | 69.      | 56.      | 61.4     | .4582        | 3.2       | 285.  |           |       | 786.                 |          | 0.00   |       |
| 7                |           |                     |                  |                |                       | 77.      | 55.      | 65.9     | .4541        | 3.7       | 436.  |           |       | 765.                 |          | .07    |       |
| 8                |           |                     |                  |                |                       | 79.      | 51.      | 66.3     | .3935        | 3.0       | 583.  |           |       | 700.                 |          | 0.00   |       |
| 9                |           |                     |                  |                |                       | 76.      | 57.      | 68.3     | .4196        | 3.3       | 410.  |           |       | 790.                 |          | 0.00   |       |
| 10               |           |                     |                  |                |                       | 72.      | 54.      | 64.6     | .3324        | 4.5       | 734.  |           |       | 600.                 |          | 0.00   |       |
| 11               |           |                     |                  |                |                       | 81.      | 61.      | 71.1     | .4764        | 3.4       | 623.  |           |       | 709.                 |          | .22    |       |
| 12               |           |                     |                  |                |                       | 81.      | 61.      | 68.9     | .5367        | 3.7       | 475.  |           |       | 770.                 |          | .57    |       |
| 13               |           |                     |                  |                |                       | 66.      | 51.      | 60.7     | .4582        | 1.9       | 243.  |           |       | 792.                 |          | .24    |       |
| 14               |           |                     |                  |                |                       | 66.      | 49.      | 56.9     | .2897        | 3.9       | 606.  |           |       | 635.                 |          | .13    |       |
| 15               |           |                     |                  |                |                       | 54.      | 44.      | 49.4     | .2212        | 4.0       | 457.  |           |       | 660.                 |          | .02    |       |
| 16               |           |                     |                  |                |                       | 48.      | 42.      | 45.1     | .2714        | 1.1       | 27.   |           |       | 722.                 |          | 1.94   |       |
| 17               |           |                     |                  |                |                       | 60.      | 41.      | 49.7     | .2459        | 3.0       | 669.  |           |       | 563.                 |          | .01    |       |
| 18               |           |                     |                  |                |                       | 62.      | 39.      | 52.8     | .2824        | 2.2       | 370.  |           |       | 710.                 |          | 0.00   |       |
| 19               |           |                     |                  |                |                       | 70.      | 47.      | 58.3     | .3587        | 1.5       | 538.  |           |       | 679.                 |          | 0.00   |       |
| 20               |           |                     |                  |                |                       | 77.      | 53.      | 66.6     | .4708        | 3.3       | 612.  |           |       | 692.                 |          | 0.00   |       |
| 21               |           |                     |                  |                |                       | 76.      | 61.      | 68.2     | .5536        | 1.9       | 225.  |           |       | 842.                 |          | .87    |       |
| 22               |           |                     |                  |                |                       | 74.      | 60.      | 66.8     | .5096        | 1.9       | 350.  |           |       | 802.                 |          | .57    |       |
| 23               |           |                     |                  |                |                       | 72.      | 56.      | 64.8     | .4750        | 1.9       | 400.  |           |       | 774.                 |          | 0.00   |       |
| 24               |           |                     |                  |                |                       | 76.      | 56.      | 64.6     | .4722        | 2.0       | 416.  |           |       | 767.                 |          | .15    |       |
| 25               |           |                     |                  |                |                       | 70.      | 56.      | 62.5     | .4630        | 1.9       | 368.  |           |       | 770.                 |          | .33    |       |
| 26               |           |                     |                  |                |                       | 76.      | 58.      | 66.3     | .4968        | 2.2       | 477.  |           |       | 754.                 |          | 0.00   |       |
| 27               |           |                     |                  |                |                       | 74.      | 64.      | 67.4     | .5226        | 3.3       | 459.  |           |       | 768.                 |          | .11    |       |
| 28               |           |                     |                  |                |                       | 76.      | 63.      | 68.2     | .5415        | 3.3       | 442.  |           |       | 780.                 |          | .07    |       |
| 29               |           |                     |                  |                |                       | 72.      | 65.      | 67.0     | .5577        | 2.6       | 161.  |           |       | 845.                 |          | 1.28   |       |
| 30               |           |                     |                  |                |                       | 66.      | 60.      | 64.2     | .5273        | 2.2       | 53.   |           |       | 838.                 |          | 3.94   |       |
| MONTHLY AVERAGE= |           |                     |                  |                |                       | 69.      | 52.      | 60.8     | 53.2         | 2.7       | 419.  |           |       | 727.                 |          | TOTAL= | 11.14 |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) OI=INCOMING SOLAR RADIATION OA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOUR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA--ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 7/73

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COUPE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO | QA<br>LY | ANDERSON          |         |          |
|------------------|--------------|------------------------------|------------------|----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------|---------|----------|
|                  |              |                              |                  |                      |                      |                               |                |                |                |                    |                 |          |        |          | BAKER<br>QA<br>LY | TS<br>F | PX<br>IN |
| 1                |              |                              |                  |                      |                      |                               | 76.            | 59.            | 68.0           | .5119              | 2.3             | 456.     |        |          | 771.              |         | 0.00     |
| 2                |              |                              |                  |                      |                      |                               | 78.            | 60.            | 68.8           | .5088              | 2.5             | 560.     |        |          | 728.              |         | .17      |
| 3                |              |                              |                  |                      |                      |                               | 78.            | 62.            | 69.4           | .5447              | 2.5             | 412.     |        |          | 796.              |         | 0.00     |
| 4                |              |                              |                  |                      |                      |                               | 75.            | 65.            | 68.1           | .5618              | 2.1             | 294.     |        |          | 826.              |         | .06      |
| 5                |              |                              |                  |                      |                      |                               | 74.            | 60.            | 66.2           | .4757              | 2.5             | 435.     |        |          | 767.              |         | .02      |
| 6                |              |                              |                  |                      |                      |                               | 72.            | 57.            | 64.7           | .4045              | 3.5             | 641.     |        |          | 657.              |         | 0.00     |
| 7                |              |                              |                  |                      |                      |                               | 79.            | 56.            | 70.0           | .4651              | 3.8             | 662.     |        |          | 675.              |         | 0.00     |
| 8                |              |                              |                  |                      |                      |                               | 88.            | 65.            | 76.6           | .5375              | 3.4             | 657.     |        |          | 717.              |         | 0.00     |
| 9                |              |                              |                  |                      |                      |                               | 82.            | 61.            | 72.7           | .5423              | 3.0             | 626.     |        |          | 713.              |         | 0.00     |
| 10               |              |                              |                  |                      |                      |                               | 74.            | 56.            | 65.8           | .4665              | 1.1             | 303.     |        |          | 807.              |         | .62      |
| 11               |              |                              |                  |                      |                      |                               | 66.            | 51.            | 60.5           | .3923              | 3.5             | 498.     |        |          | 704.              |         | .04      |
| 12               |              |                              |                  |                      |                      |                               | 61.            | 44.            | 54.5           | .2718              | 3.9             | 504.     |        |          | 665.              |         | 0.00     |
| 13               |              |                              |                  |                      |                      |                               | 68.            | 51.            | 60.9           | .3887              | 3.0             | 217.     |        |          | 796.              |         | 0.00     |
| 14               |              |                              |                  |                      |                      |                               | 74.            | 57.            | 66.8           | .4596              | 3.3             | 523.     |        |          | 729.              |         | .98      |
| 15               |              |                              |                  |                      |                      |                               | 69.            | 56.            | 62.1           | .4274              | 2.6             | 343.     |        |          | 772.              |         | .02      |
| 16               |              |                              |                  |                      |                      |                               | 71.            | 50.            | 61.6           | .3587              | 2.4             | 621.     |        |          | 645.              |         | 0.00     |
| 17               |              |                              |                  |                      |                      |                               | 74.            | 49.            | 62.2           | .3339              | 1.3             | 657.     |        |          | 625.              |         | 0.00     |
| 18               |              |                              |                  |                      |                      |                               | 75.            | 52.            | 63.6           | .3899              | 1.2             | 541.     |        |          | 699.              |         | 0.00     |
| 19               |              |                              |                  |                      |                      |                               | 77.            | 53.            | 65.9           | .4114              | 2.3             | 612.     |        |          | 673.              |         | 0.00     |
| 20               |              |                              |                  |                      |                      |                               | 71.            | 59.            | 64.7           | .4895              | 1.5             | 177.     |        |          | 827.              |         | .07      |
| 21               |              |                              |                  |                      |                      |                               | 74.            | 54.            | 64.1           | .4235              | 1.8             | 454.     |        |          | 741.              |         | 0.00     |
| 22               |              |                              |                  |                      |                      |                               | 75.            | 54.            | 64.5           | .3171              | 2.8             | 696.     |        |          | 606.              |         | 0.00     |
| 23               |              |                              |                  |                      |                      |                               | 74.            | 53.            | 63.8           | .3344              | 2.0             | 696.     |        |          | 603.              |         | 0.00     |
| 24               |              |                              |                  |                      |                      |                               | 79.            | 58.            | 68.7           | .3804              | 3.3             | 645.     |        |          | 663.              |         | 0.00     |
| 25               |              |                              |                  |                      |                      |                               | 78.            | 57.            | 68.2           | .4486              | 1.5             | 507.     |        |          | 740.              |         | 0.00     |
| 26               |              |                              |                  |                      |                      |                               | 73.            | 62.            | 66.6           | .5195              | 1.5             | 245.     |        |          | 825.              |         | .12      |
| 27               |              |                              |                  |                      |                      |                               | 79.            | 65.            | 70.6           | .5966              | 2.9             | 391.     |        |          | 806.              |         | .88      |
| 28               |              |                              |                  |                      |                      |                               | 80.            | 62.            | 71.3           | .5234              | 3.7             | 581.     |        |          | 717.              |         | .24      |
| 29               |              |                              |                  |                      |                      |                               | 71.            | 58.            | 64.8           | .4800              | 2.3             | 335.     |        |          | 788.              |         | .17      |
| 30               |              |                              |                  |                      |                      |                               | 77.            | 56.            | 65.7           | .4399              | 1.8             | 539.     |        |          | 705.              |         | 0.00     |
| 31               |              |                              |                  |                      |                      |                               | 79.            | 58.            | 68.3           | .5134              | 1.3             | 446.     |        |          | 767.              |         | 0.00     |
| MONTHLY AVERAGE= |              |                              |                  |                      |                      |                               |                |                |                |                    |                 | 493.     |        |          | 728.              | TOTAL=  | 3.39     |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE (ATP) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QO=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOUR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 8/73

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COURSE<br>WE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN    |
|------------------|--------------|------------------------------|-------------------------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|-------------|
| 1                |              |                              |                                     |                      |                               | 77.            | 59.            | 68.1           | .5359              | 1.6             | 462.     |              |          | 756.                          |                | .17      |             |
| 2                |              |                              |                                     |                      |                               | 70.            | 66.            | 67.9           | .5820              | 2.3             | 133.     |              |          | 853.                          |                | .26      |             |
| 3                |              |                              |                                     |                      |                               | 77.            | 61.            | 69.5           | .5594              | 1.0             | 193.     |              |          | 853.                          |                | .54      |             |
| 4                |              |                              |                                     |                      |                               | 76.            | 59.            | 67.8           | .4924              | 3.3             | 567.     |              |          | 695.                          |                | .08      |             |
| 5                |              |                              |                                     |                      |                               | 76.            | 56.            | 65.9           | .4101              | 3.3             | 654.     |              |          | 625.                          |                | 0.00     |             |
| 6                |              |                              |                                     |                      |                               | 71.            | 53.            | 63.8           | .4365              | 2.2             | 259.     |              |          | 801.                          |                | .02      |             |
| 7                |              |                              |                                     |                      |                               | 79.            | 61.            | 69.8           | .5172              | 2.9             | 469.     |              |          | 758.                          |                | 0.00     |             |
| 8                |              |                              |                                     |                      |                               | 76.            | 63.            | 70.0           | .5211              | 2.2             | 362.     |              |          | 806.                          |                | 0.00     |             |
| 9                |              |                              |                                     |                      |                               | 79.            | 65.            | 72.7           | .6036              | 2.4             | 387.     |              |          | 813.                          |                | .01      |             |
| 10               |              |                              |                                     |                      |                               | 85.            | 66.            | 72.4           | .6089              | 2.5             | 476.     |              |          | 769.                          |                | .51      |             |
| 11               |              |                              |                                     |                      |                               | 75.            | 65.            | 69.5           | .5777              | 2.4             | 338.     |              |          | 811.                          |                | .34      |             |
| 12               |              |                              |                                     |                      |                               | 75.            | 58.            | 66.5           | .4541              | 2.8             | 506.     |              |          | 712.                          |                | 0.00     |             |
| 13               |              |                              |                                     |                      |                               | 70.            | 58.            | 63.8           | .4459              | 2.9             | 315.     |              |          | 782.                          |                | 0.00     |             |
| 14               |              |                              |                                     |                      |                               | 72.            | 57.            | 64.2           | .4637              | 3.0             | 394.     |              |          | 753.                          |                | 0.00     |             |
| 15               |              |                              |                                     |                      |                               | 66.            | 57.            | 61.6           | .4520              | 2.6             | 181.     |              |          | 804.                          |                | .09      |             |
| 16               |              |                              |                                     |                      |                               | 72.            | 56.            | 62.7           | .4293              | 2.4             | 522.     |              |          | 676.                          |                | 0.00     |             |
| 17               |              |                              |                                     |                      |                               | 77.            | 54.            | 65.0           | .4644              | 1.4             | 536.     |              |          | 680.                          |                | 0.00     |             |
| 18               |              |                              |                                     |                      |                               | 79.            | 58.            | 66.7           | .4750              | 1.2             | 534.     |              |          | 690.                          |                | 0.00     |             |
| 19               |              |                              |                                     |                      |                               | 76.            | 56.            | 64.1           | .4446              | 1.3             | 516.     |              |          | 684.                          |                | 0.00     |             |
| 20               |              |                              |                                     |                      |                               | 74.            | 53.            | 63.0           | .4280              | 1.9             | 511.     |              |          | 679.                          |                | 0.00     |             |
| 21               |              |                              |                                     |                      |                               | 74.            | 52.            | 63.6           | .4241              | 1.9             | 524.     |              |          | 672.                          |                | 0.00     |             |
| 22               |              |                              |                                     |                      |                               | 67.            | 48.            | 57.5           | .3775              | 3.0             | 242.     |              |          | 762.                          |                | .14      |             |
| 23               |              |                              |                                     |                      |                               | 66.            | 42.            | 55.0           | .2911              | 1.7             | 534.     |              |          | 612.                          |                | 0.00     |             |
| 24               |              |                              |                                     |                      |                               | 65.            | 44.            | 55.5           | .2820              | 2.1             | 584.     |              |          | 578.                          |                | 0.00     |             |
| 25               |              |                              |                                     |                      |                               | 69.            | 42.            | 56.2           | .3216              | 1.4             | 511.     |              |          | 630.                          |                | 0.00     |             |
| 26               |              |                              |                                     |                      |                               | 69.            | 56.            | 61.9           | .4379              | 1.0             | 227.     |              |          | 792.                          |                | .02      |             |
| 27               |              |                              |                                     |                      |                               | 78.            | 58.            | 67.4           | .5439              | 2.0             | 414.     |              |          | 751.                          |                | 0.00     |             |
| 28               |              |                              |                                     |                      |                               | 78.            | 62.            | 69.1           | .5203              | 3.2             | 480.     |              |          | 721.                          |                | .90      |             |
| 29               |              |                              |                                     |                      |                               | 78.            | 57.            | 66.7           | .4902              | 2.7             | 516.     |              |          | 682.                          |                | 0.00     |             |
| 30               |              |                              |                                     |                      |                               | 82.            | 68.            | 73.4           | .5811              | 3.5             | 416.     |              |          | 782.                          |                | .40      |             |
| 31               |              |                              |                                     |                      |                               | 82.            | 64.            | 71.3           | .5718              | 2.8             | 445.     |              |          | 751.                          |                | 0.00     |             |
| MONTHLY AVERAGE= |              |                              |                                     |                      |                               |                |                |                |                    | 75.             | 57.      | 65.6         | 57.4     | 2.3                           | 426.           | 733.     | TOTAL= 3.47 |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION.  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION. DANVILLE,VFRMONT-- 9/73

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>SUR.<br>DEN.<br>IN | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>OA<br>LY | AVE<br>TS<br>F | RX<br>IN    | PO<br>IN |
|------------------|--------------|------------------------------|----------------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|-------------|----------|
| 1                |              |                              |                            |                               | 79.            | 60.            | 69.1           | .5479              | 1.8             | 389.     |              |          | 766.                          |                | 0.00        |          |
| 2                |              |                              |                            |                               | 80.            | 62.            | 70.8           | .5888              | 2.0             | 367.     |              |          | 787.                          |                | 0.00        |          |
| 3                |              |                              |                            |                               | 80.            | 66.            | 72.3           | .6010              | 3.3             | 414.     |              |          | 769.                          |                | 0.00        |          |
| 4                |              |                              |                            |                               | 76.            | 60.            | 69.0           | .5383              | 2.6             | 295.     |              |          | 807.                          |                | 0.00        |          |
| 5                |              |                              |                            |                               | 77.            | 60.            | 66.9           | .5367              | 3.1             | 402.     |              |          | 739.                          |                | 0.00        |          |
| 6                |              |                              |                            |                               | 68.            | 56.            | 63.2           | .4701              | 3.4             | 131.     |              |          | 819.                          |                | 2.21        |          |
| 7                |              |                              |                            |                               | 62.            | 49.            | 55.2           | .2753              | 3.4             | 419.     |              |          | 653.                          |                | 0.00        |          |
| 8                |              |                              |                            |                               | 54.            | 46.            | 49.9           | .2544              | 3.1             | 122.     |              |          | 740.                          |                | 0.00        |          |
| 9                |              |                              |                            |                               | 53.            | 46.            | 48.8           | .2455              | 2.8             | 150.     |              |          | 727.                          |                | 0.00        |          |
| 10               |              |                              |                            |                               | 63.            | 40.            | 49.1           | .2194              | 2.8             | 499.     |              |          | 557.                          |                | 0.00        |          |
| 11               |              |                              |                            |                               | 63.            | 40.            | 53.4           | .2833              | 2.1             | 209.     |              |          | 738.                          |                | .03         |          |
| 12               |              |                              |                            |                               | 56.            | 45.            | 49.7           | .2536              | 2.9             | 313.     |              |          | 673.                          |                | 0.00        |          |
| 13               |              |                              |                            |                               | 58.            | 42.            | 48.5           | .2459              | 2.5             | 347.     |              |          | 647.                          |                | 0.00        |          |
| 14               |              |                              |                            |                               | 54.            | 42.            | 48.2           | .2771              | 1.2             | 158.     |              |          | 721.                          |                | .34         |          |
| 15               |              |                              |                            |                               | 52.            | 49.            | 50.7           | .3334              | 1.1             | 69.      |              |          | 752.                          |                | .19         |          |
| 16               |              |                              |                            |                               | 53.            | 41.            | 47.2           | .2619              | 3.1             | 155.     |              |          | 715.                          |                | 0.00        |          |
| 17               |              |                              |                            |                               | 53.            | 33.            | 42.5           | .1977              | 1.8             | 480.     |              |          | 516.                          |                | 0.00        |          |
| 18               |              |                              |                            |                               | 52.            | 40.            | 46.6           | .2731              | 3.7             | 47.      |              |          | 729.                          |                | 1.37        |          |
| 19               |              |                              |                            |                               | 57.            | 37.            | 45.0           | .2216              | 3.2             | 427.     |              |          | 564.                          |                | 0.00        |          |
| 20               |              |                              |                            |                               | 54.            | 34.            | 43.8           | .2312              | 2.3             | 93.      |              |          | 708.                          |                | .02         |          |
| 21               |              |                              |                            |                               | 47.            | 28.            | 36.0           | .1458              | 2.5             | 415.     |              |          | 520.                          |                | 0.00        |          |
| 22               |              |                              |                            |                               | 55.            | 27.            | 38.8           | .1984              | 2.4             | 47.      |              |          | 685.                          |                | .96         |          |
| 23               |              |                              |                            |                               | 59.            | 48.            | 52.7           | .3186              | 2.0             | 246.     |              |          | 710.                          |                | 0.00        |          |
| 24               |              |                              |                            |                               | 48.            | 44.            | 46.8           | .2784              | 1.1             | 47.      |              |          | 730.                          |                | .03         |          |
| 25               |              |                              |                            |                               | 58.            | 41.            | 47.7           | .2500              | 1.7             | 352.     |              |          | 616.                          |                | 0.00        |          |
| 26               |              |                              |                            |                               | 61.            | 38.            | 48.2           | .2753              | 1.4             | 368.     |              |          | 606.                          |                | 0.00        |          |
| 27               |              |                              |                            |                               | 69.            | 44.            | 56.3           | .3582              | 1.8             | 364.     |              |          | 651.                          |                | .05         |          |
| 28               |              |                              |                            |                               | 61.            | 41.            | 50.7           | .2492              | 3.1             | 403.     |              |          | 583.                          |                | 0.00        |          |
| 29               |              |                              |                            |                               | 57.            | 40.            | 48.4           | .2381              | 3.5             | 214.     |              |          | 692.                          |                | 0.00        |          |
| 30               |              |                              |                            |                               | 54.            | 31.            | 42.7           | .1729              | 3.1             | 417.     |              |          | 520.                          |                | 0.00        |          |
| MONTHLY AVERAGE= |              |                              |                            |                               |                |                |                |                    |                 | 60.      | 51.9         | 46.0     | 2.5                           | 279.           | TOTAL= 5.24 |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION RX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QK=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 10/73

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COUPSE<br>WE<br>IN | SNOW<br>SUR.<br>DEN.<br>IN | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | Q <sup>A</sup><br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------------|----------------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------------------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                            |                            |                               | 62.            | 33.            | 47.1           | .2088              | 1.8             | 401.     |              |                      | 553.                          |                | 0.00     |          |
| 2                |              |                              |                            |                            |                               | 58.            | 38.            | 51.4           | .2861              | 2.5             | 208.     |              |                      | 709.                          |                | .08      |          |
| 3                |              |                              |                            |                            |                               | 59.            | 56.            | 57.8           | .4293              | 1.8             | 43.      |              |                      | 796.                          |                | .02      |          |
| 4                |              |                              |                            |                            |                               | 63.            | 55.            | 58.0           | .4015              | 1.5             | 180.     |              |                      | 760.                          |                | 0.00     |          |
| 5                |              |                              |                            |                            |                               | 57.            | 46.            | 52.0           | .3161              | 4.4             | 46.      |              |                      | 760.                          |                | .87      |          |
| 6                |              |                              |                            |                            |                               | 52.            | 37.            | 45.4           | .1726              | 4.5             | 391.     |              |                      | 530.                          |                | 0.00     |          |
| 7                |              |                              |                            |                            |                               | 58.            | 33.            | 43.6           | .1599              | 2.3             | 360.     |              |                      | 546.                          |                | 0.00     |          |
| 8                |              |                              |                            |                            |                               | 62.            | 32.            | 45.8           | .1735              | 1.4             | 375.     |              |                      | 539.                          |                | 0.00     |          |
| 9                |              |                              |                            |                            |                               | 64.            | 37.            | 48.0           | .2179              | 1.3             | 352.     |              |                      | 570.                          |                | 0.00     |          |
| 10               |              |                              |                            |                            |                               | 55.            | 39.            | 48.5           | .2293              | 2.1             | 230.     |              |                      | 668.                          |                | 0.00     |          |
| 11               |              |                              |                            |                            |                               | 56.            | 33.            | 43.7           | .2133              | 1.3             | 325.     |              |                      | 566.                          |                | 0.00     |          |
| 12               |              |                              |                            |                            |                               | 64.            | 38.            | 49.2           | .2496              | 1.4             | 202.     |              |                      | 686.                          |                | 0.00     |          |
| 13               |              |                              |                            |                            |                               | 70.            | 44.            | 57.7           | .3201              | 2.2             | 231.     |              |                      | 715.                          |                | .05      |          |
| 14               |              |                              |                            |                            |                               | 57.            | 36.            | 49.4           | .2197              | 4.8             | 185.     |              |                      | 694.                          |                | .07      |          |
| 15               |              |                              |                            |                            |                               | 50.            | 33.            | 41.7           | .2050              | 2.9             | 177.     |              |                      | 655.                          |                | .07      |          |
| 16               |              |                              |                            |                            |                               | 42.            | 36.            | 37.3           | .1703              | 2.7             | 159.     |              |                      | 639.                          |                | .22      |          |
| 17               |              |                              |                            |                            |                               | 39.            | 33.            | 36.7           | .1605              | 2.1             | 116.     |              |                      | 654.                          |                | .01      |          |
| 18               |              |                              |                            |                            |                               | 43.            | 31.            | 36.6           | .1433              | 1.8             | 185.     |              |                      | 618.                          |                | 0.00     |          |
| 19               |              |                              |                            |                            |                               | 45.            | 28.            | 35.9           | .1448              | 2.4             | 273.     |              |                      | 543.                          |                | 0.00     |          |
| 20               |              |                              |                            |                            |                               | 40.            | 35.            | 37.7           | .1899              | 2.2             | 24.      |              |                      | 680.                          |                | .08      |          |
| 21               |              |                              |                            |                            |                               | 46.            | 29.            | 36.0           | .1423              | 2.3             | 302.     |              |                      | 506.                          |                | 0.00     |          |
| 22               |              |                              |                            |                            |                               | 53.            | 31.            | 40.3           | .1915              | 1.7             | 286.     |              |                      | 542.                          |                | 0.00     |          |
| 23               |              |                              |                            |                            |                               | 63.            | 34.            | 47.1           | .2030              | 1.8             | 290.     |              |                      | 566.                          |                | 0.00     |          |
| 24               |              |                              |                            |                            |                               | 63.            | 41.            | 50.2           | .2471              | 1.5             | 243.     |              |                      | 631.                          |                | 0.00     |          |
| 25               |              |                              |                            |                            |                               | 52.            | 38.            | 45.8           | .2504              | 3.0             | 171.     |              |                      | 666.                          |                | 0.00     |          |
| 26               |              |                              |                            |                            |                               | 57.            | 42.            | 46.9           | .2524              | 2.2             | 230.     |              |                      | 620.                          |                | 0.00     |          |
| 27               |              |                              |                            |                            |                               | 48.            | 26.            | 35.5           | .1517              | 4.7             | 209.     |              |                      | 575.                          |                | 0.00     |          |
| 28               |              |                              |                            |                            |                               | 39.            | 21.            | 31.1           | .1136              | 1.4             | 242.     |              |                      | 516.                          |                | 0.00     |          |
| 29               |              |                              |                            |                            |                               | 43.            | 30.            | 38.2           | .1476              | 2.7             | 169.     |              |                      | 618.                          |                | 0.00     |          |
| 30               |              |                              |                            |                            |                               | 53.            | 39.            | 47.3           | .2744              | 2.3             | 32.      |              |                      | 733.                          |                | .42      |          |
| 31               |              |                              |                            |                            |                               | 52.            | 34.            | 42.1           | .2216              | 2.0             | 233.     |              |                      | 573.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                            |                            |                               | 54.            | 36.            | 44.7           | 36.9               | 2.4             | 222.     |              |                      | 627.                          |                | TOTAL=   | 2.79     |

THE SYMBOLS USED ARE AS FOLLOWS.  
WE=WATER EQUIVALENT EA=VAPOR PPESSURE(ATR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QK=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA--ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 11/73

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | ANDERSON |      |      | AVE<br>TS<br>F | PX<br>IN | PO<br>IN         |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|------|------|----------------|----------|------------------|
|                  |              |                              |                  |                       |                      |                               |                |                |                |                    |                 | BAKER    | QA   | LY   |                |          |                  |
|                  |              |                              |                  |                       |                      |                               |                |                |                |                    |                 | ALFREDO  | QA   | LY   |                |          |                  |
|                  |              |                              |                  |                       |                      |                               |                |                |                |                    |                 | LY       | LY   | LY   |                |          |                  |
| 1                |              |                              |                  |                       |                      |                               | 45.            | 38.            | 41.5           | .2260              | 2.3             | 21.      | 701. |      | 1.24           |          |                  |
| 2                |              |                              |                  |                       |                      |                               | 50.            | 38.            | 44.0           | .1744              | 4.1             | 249.     | 551. |      | .33            |          |                  |
| 3                |              |                              |                  |                       |                      |                               | 38.            | 30.            | 34.4           | .1330              | 5.5             | 158.     | 597. |      | .16            |          |                  |
| 4                |              |                              |                  |                       |                      |                               | 30.            | 24.            | 28.3           | .0906              | 6.7             | 106.     | 601. |      | 0.00           |          |                  |
| 5                |              |                              |                  |                       |                      |                               | 31.            | 22.            | 25.9           | .0834              | 3.6             | 233.     | 468. |      | 0.00           |          |                  |
| 6                |              |                              |                  |                       |                      |                               | 23.            | 19.            | 20.6           | .0796              | 4.1             | 151.     | 529. |      | .10            |          |                  |
| 7                |              |                              |                  |                       |                      |                               | 30.            | 19.            | 24.6           | .1026              | 2.9             | 130.     | 563. |      | 0.00           |          |                  |
| 8                |              |                              |                  |                       |                      |                               | 33.            | 26.            | 29.8           | .1249              | 2.5             | 40.      | 634. |      | .08            |          |                  |
| 9                |              |                              |                  |                       |                      |                               | 27.            | 17.            | 22.2           | .0892              | 3.7             | 152.     | 529. |      | .01            |          |                  |
| 10               |              |                              |                  |                       |                      |                               | 23.            | 14.            | 19.2           | .0828              | 3.5             | 134.     | 529. |      | .06            |          |                  |
| 11               |              |                              |                  |                       |                      |                               | 26.            | 18.            | 21.8           | .0893              | 2.6             | 165.     | 510. |      | .02            |          |                  |
| 12               |              |                              |                  |                       |                      |                               | 34.            | 23.            | 29.5           | .1189              | 1.5             | 77.      | 617. |      | 0.00           |          |                  |
| 13               |              |                              |                  |                       |                      |                               | 39.            | 33.            | 36.3           | .1561              | 1.0             | 24.      | 671. |      | 0.00           |          |                  |
| 14               |              |                              |                  |                       |                      |                               | 56.            | 38.            | 44.9           | .2155              | 2.6             | 79.      | 698. |      | 0.00           |          |                  |
| 15               |              |                              |                  |                       |                      |                               | 41.            | 35.            | 38.8           | .2047              | .9              | 19.      | 686. |      | .67            |          |                  |
| 16               |              |                              |                  |                       |                      |                               | 38.            | 21.            | 28.4           | .1307              | 4.3             | 28.      | 629. |      | .70            |          |                  |
| 17               |              |                              |                  |                       |                      |                               | 28.            | 19.            | 22.8           | .0990              | 3.8             | 82.      | 577. |      | .11            |          |                  |
| 18               |              |                              |                  |                       |                      |                               | 29.            | 16.            | 23.7           | .0964              | 4.1             | 192.     | 463. |      | .02            |          |                  |
| 19               |              |                              |                  |                       |                      |                               | 29.            | 12.            | 21.1           | .0874              | 2.0             | 216.     | 408. |      | 0.00           |          |                  |
| 20               |              |                              |                  |                       |                      |                               | 24.            | 14.            | 21.0           | .0921              | 1.8             | 65.      | 577. |      | 0.00           |          |                  |
| 21               |              |                              |                  |                       |                      |                               | 38.            | 13.            | 27.4           | .1096              | 2.3             | 233.     | 411. |      | 0.00           |          |                  |
| 22               |              |                              |                  |                       |                      |                               | 43.            | 35.            | 38.2           | .2047              | 1.1             | 55.      | 670. |      | .22            |          |                  |
| 23               |              |                              |                  |                       |                      |                               | 42.            | 32.            | 37.6           | .1980              | 1.2             | 87.      | 646. |      | 0.00           |          |                  |
| 24               |              |                              |                  |                       |                      |                               | 40.            | 34.            | 36.6           | .1812              | 2.3             | 129.     | 597. |      | .26            |          |                  |
| 25               |              |                              |                  |                       |                      |                               | 45.            | 29.            | 35.2           | .1726              | 3.9             | 33.      | 662. |      | .13            |          |                  |
| 26               |              |                              |                  |                       |                      |                               | 37.            | 19.            | 28.3           | .1066              | 1.4             | 188.     | 461. |      | 0.00           |          |                  |
| 27               |              |                              |                  |                       |                      |                               | 36.            | 31.            | 32.7           | .1431              | 2.8             | 8.       | 654. |      | .32            |          |                  |
| 28               |              |                              |                  |                       |                      |                               | 46.            | 36.            | 40.4           | .2151              | 2.0             | 13.      | 695. |      | .26            |          |                  |
| 29               |              |                              |                  |                       |                      |                               | 43.            | 29.            | 33.3           | .1453              | 4.5             | 48.      | 646. |      | .13            |          |                  |
| 30               |              |                              |                  |                       |                      |                               | 32.            | 28.            | 29.9           | .1380              | 3.0             | 25.      | 636. |      | .29            |          |                  |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 | 25.      | 30.6 | 25.2 | 2.9            | 105.     | 587. TOTAL= 5.11 |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 12/77

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COURSE<br>WE<br>IN | SNOW<br>SUR.<br>DEN.<br>IN | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------------|----------------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                            |                            |                               | 28.            | 20.            | 23.2           | .1110              | 4.3             | 69.      | .78    |          | 579.                          |                | .10      |          |
| 2                |              |                              |                            |                            |                               | 27.            | 10.            | 17.0           | .0792              | 1.5             | 169.     | .82    |          | 414.                          |                | 0.00     |          |
| 3                | 0900         | 2.8                          |                            |                            |                               | 28.            | 18.            | 23.6           | .1060              | 2.7             | 64.      | .78    |          | 583.                          |                | 0.00     |          |
| 4                | 0900         | 1.5                          |                            |                            |                               | 41.            | 26.            | 34.0           | .1954              | .8              | 25.      | .80    |          | 657.                          |                | 0.00     |          |
| 5                |              | 0.0                          |                            |                            |                               | 53.            | 38.            | 44.1           | .2897              | 2.3             | 14.      | .10    |          | 716.                          |                | .25      |          |
| 6                | 0900         | 0.0                          |                            |                            |                               | 54.            | 32.            | 39.2           | .2095              | 3.5             | 47.      | .19    |          | 676.                          |                | .31      |          |
| 7                | 0900         | 0.0                          |                            |                            |                               | 31.            | 17.            | 24.3           | .1093              | 3.2             | 77.      | .23    |          | 575.                          |                | 0.00     |          |
| 8                |              |                              |                            |                            |                               | 26.            | 11.            | 18.2           | .0964              | .9              | 139.     | .22    |          | 464.                          |                | 0.00     |          |
| 9                |              |                              |                            |                            |                               | 43.            | 20.            | 28.4           | .1556              | 1.4             | 18.      | .33    |          | 630.                          |                | .48      |          |
| 10               | 0900         | 0.0                          |                            |                            |                               | 43.            | 28.            | 35.0           | .1987              | 2.1             | 28.      | .11    |          | 661.                          |                | .03      |          |
| 11               | 0900         | 0.0                          |                            |                            |                               | 28.            | 25.            | 26.7           | .1361              | 3.2             | 56.      | .27    |          | 603.                          |                | 0.00     |          |
| 12               |              | 0.0                          |                            |                            |                               | 25.            | 8.             | 16.7           | .0767              | 3.9             | 152.     | .33    |          | 429.                          |                | 0.00     |          |
| 13               | 0900         | 0.0                          |                            |                            |                               | 29.            | 8.             | 19.3           | .0798              | 2.7             | 164.     | .28    |          | 415.                          |                | .09      |          |
| 14               | 0900         | 4.0                          |                            |                            |                               | 35.            | 20.            | 30.7           | .1652              | 5.3             | 11.      | .90    |          | 643.                          |                | 1.26     |          |
| 15               |              |                              |                            |                            |                               | 19.            | 9.             | 14.6           | .0755              | 3.6             | 84.      | .79    |          | 519.                          |                | 0.00     |          |
| 16               |              |                              |                            |                            |                               | 16.            | 8.             | 11.5           | .0632              | 2.2             | 103.     | .80    |          | 483.                          |                | .07      |          |
| 17               | 0900         | 7.5                          |                            |                            |                               | 15.            | 7.             | 12.1           | .0688              | 5.8             | 17.      | .82    |          | 549.                          |                | 1.53     |          |
| 18               | 0900         |                              | 1.8                        | 8.0                        |                               | 6.             | -5.            | .1             | .0357              | 6.0             | 137.     | .75    |          | 383.                          |                | .06      |          |
| 19               |              |                              |                            |                            |                               | 8.             | -8.            | -.2            | .0337              | 2.2             | 155.     | .80    |          | 351.                          |                | 0.00     |          |
| 20               |              |                              |                            |                            |                               | 35.            | 5.             | 17.5           | .0885              | 3.4             | 21.      | .86    |          | 574.                          |                | .37      |          |
| 21               |              |                              |                            |                            |                               | 44.            | 13.            | 34.2           | .1880              | 6.5             | 13.      | .77    |          | 661.                          |                | 2.33     |          |
| 22               |              |                              |                            |                            |                               | 12.            | 1.             | 6.1            | .0471              | 4.4             | 135.     | .81    |          | 413.                          |                | .01      |          |
| 23               |              |                              |                            |                            |                               | 21.            | 4.             | 11.9           | .0665              | 1.8             | 54.      | .90    |          | 532.                          |                | .15      |          |
| 24               | 1300         | 6.8                          |                            |                            |                               | 8.             | -10.           | -1.9           | .0320              | 1.1             | 178.     | .79    |          | 303.                          |                | 0.00     |          |
| 25               |              |                              |                            |                            |                               | 29.            | -6.            | 11.7           | .0603              | 3.6             | 64.      | .75    |          | 525.                          |                | .07      |          |
| 26               | 1145         | 5.6                          |                            |                            |                               | 45.            | 29.            | 37.0           | .2112              | 1.9             | 66.      | .76    |          | 650.                          |                | .35      |          |
| 27               | 1030         | 4.5                          | 1.6                        | 5.9                        |                               | 35.            | 34.            | 34.8           | .2017              | 1.9             | 9.       | .89    |          | 665.                          |                | .59      |          |
| 28               | 0900         | 4.5                          |                            |                            |                               | 34.            | 28.            | 31.7           | .1591              | 2.5             | 64.      | .72    |          | 624.                          |                | .27      |          |
| 29               |              |                              |                            |                            |                               | 36.            | 23.            | 30.0           | .1333              | 2.5             | 113.     | .78    |          | 563.                          |                | 0.00     |          |
| 30               |              |                              |                            |                            |                               | 34.            | 15.            | 25.2           | .0847              | 3.8             | 141.     | .76    |          | 497.                          |                | 0.00     |          |
| 31               |              |                              |                            |                            |                               | 21.            | 15.            | 18.0           | .0933              | 1.0             | 40.      | .88    |          | 570.                          |                | .14      |          |
| MONTHLY AVERAGE= |              |                              |                            |                            |                               | 29.            | 14.            | 21.8           | 21.7               | 3.0             | 78.      | .64    |          | 545.                          |                | TOTAL=   | 8.46     |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR P PESSURE (AIR) O1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW O4=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPO P PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 1/74

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | Q <sub>A</sub><br>LY | ANDERSON<br>BAKER<br>Q <sub>A</sub><br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |      |      |        |      |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------------------|-------------------------------------------|----------------|----------|----------|------|------|--------|------|
| 1                |              |                              |                  |                       |                      | 2.2                           | 30.            | 19.            | 24.0           | .1045              | 2.5             | 16.      | .88          |                      | 607.                                      |                | .14      |          |      |      |        |      |
| 2                | 0900         | 6.5                          |                  |                       |                      | 2.2                           | 16.            | -1.            | 7.2            | .0432              | 2.3             | 161.     | .84          |                      | 388.                                      |                | .02      |          |      |      |        |      |
| 3                | 0900         | 6.8                          | 1.6              | 7.5                   |                      | 2.3                           | 16.            | 10.            | 14.0           | .0669              | 1.1             | 93.      | .83          |                      | 513.                                      |                | .04      |          |      |      |        |      |
| 4                | 0900         | 8.0                          |                  |                       |                      | 2.4                           | 21.            | 7.             | 15.4           | .0692              | 2.2             | 109.     | .87          |                      | 504.                                      |                | .05      |          |      |      |        |      |
| 5                |              |                              |                  |                       |                      | 2.5                           | 17.            | 4.             | 10.6           | .0538              | 1.3             | 123.     | .84          |                      | 466.                                      | -4.0           | .02      |          |      |      |        |      |
| 6                |              |                              |                  |                       |                      | 2.4                           | 20.            | 4.             | 13.9           | .0649              | 1.1             | 90.      | .80          |                      | 518.                                      | 4.2            | .03      |          |      |      |        |      |
| 7                | 1000         | 8.6                          |                  |                       |                      | 2.4                           | 23.            | 11.            | 16.8           | .0715              | 2.3             | 74.      | .81          |                      | 546.                                      | 9.2            | .07      |          |      |      |        |      |
| 8                | 0900         | 9.3                          |                  |                       |                      | 2.5                           | 12.            | -16.           | -1.0           | .0271              | 4.0             | 186.     | .83          |                      | 327.                                      | -12.9          | .07      |          |      |      |        |      |
| 9                | 0900         | 9.3                          |                  |                       | .08                  | 2.5                           | 4.             | -12.           | -2.9           | .0302              | .6              | 59.      | .90          |                      | 468.                                      | -8.9           | .17      |          |      |      |        |      |
| 10               | 0900         | 12.3                         | 2.7              | 13.9                  | .08                  | 2.7                           | 17.            | -3.            | 10.0           | .0630              | .4              | 52.      | .85          |                      | 529.                                      | 8.2            | .12      |          |      |      |        |      |
| 11               | 0900         | 13.3                         | 3.0              | 15.0                  | .17                  | 2.9                           | 21.            | 5.             | 15.6           | .0824              | 2.4             | 30.      | .90          |                      | 564.                                      | 14.8           | .36      |          |      |      |        |      |
| 12               |              |                              |                  |                       |                      | 2.9                           | 9.             | -7.            | 3.2            | .0426              | 3.2             | 129.     | .87          |                      | 437.                                      | -5.3           | .04      |          |      |      |        |      |
| 13               |              |                              |                  |                       |                      | 2.9                           | 7.             | -19.           | -4.3           | .0284              | 2.8             | 158.     | .83          |                      | 373.                                      | -18.9          | 0.00     |          |      |      |        |      |
| 14               | 0900         | 12.2                         | 2.7              | 12.9                  | .20                  | 3.1                           | 28.            | -7.            | 9.2            | .0503              | 4.1             | 147.     | .80          |                      | 445.                                      | -2.0           | 0.00     |          |      |      |        |      |
| 15               | 0900         | 11.5                         |                  |                       | .21                  | 3.0                           | 32.            | 7.             | 20.3           | .0910              | 3.3             | 73.      | .84          |                      | 568.                                      | 19.1           | .05      |          |      |      |        |      |
| 16               | 0900         | 12.7                         | 3.0              | 13.8                  | .19                  | 3.2                           | 10.            | -2.            | 5.0            | .0521              | 1.0             | 27.      | .89          |                      | 516.                                      | 3.2            | .33      |          |      |      |        |      |
| 17               | 0900         | 15.2                         | 3.1              | 16.2                  | .09                  | 3.1                           | -5.            | -22.           | -13.9          | .0157              | 2.4             | 210.     | .84          |                      | 272.                                      | -26.8          | .02      |          |      |      |        |      |
| 18               | 1000         | 14.7                         | 3.7              | 16.5                  | .09                  | 3.4                           | 9.             | -23.           | -6.9           | .0228              | 1.5             | 136.     | .84          |                      | 398.                                      | -11.7          | .02      |          |      |      |        |      |
| 19               |              |                              |                  |                       |                      | 3.3                           | 17.            | 1.             | 10.2           | .0664              | 4.1             | 168.     | .87          |                      | 435.                                      | 8.3            | .06      |          |      |      |        |      |
| 20               |              |                              |                  |                       |                      | 3.4                           | 16.            | -8.            | 5.6            | .0475              | 1.0             | 237.     | .70          |                      | 319.                                      | -3.5           | 0.00     |          |      |      |        |      |
| 21               | 0900         | 14.0                         | 3.7              | 15.5                  | .13                  | 3.6                           | 34.            | 16.            | 25.6           | .1335              | 4.0             | 27.      | .70          |                      | 614.                                      | 25.9           | .51      |          |      |      |        |      |
| 22               | 0900         | 13.3                         | 3.7              | 14.9                  | .17                  | 3.8                           | 34.            | 13.            | 27.1           | .1301              | 3.5             | 111.     | .75          |                      | 579.                                      | 23.9           | .05      |          |      |      |        |      |
| 23               | 0900         | 12.8                         |                  |                       | .19                  | 3.7                           | 37.            | 14.            | 28.8           | .1446              | 3.1             | 34.      | .62          |                      | 629.                                      | 28.0           | .15      |          |      |      |        |      |
| 24               | 0900         | 12.7                         |                  |                       | .19                  | 3.8                           | 30.            | 18.            | 23.1           | .0964              | 3.0             | 162.     | .74          |                      | 512.                                      | 17.3           | .04      |          |      |      |        |      |
| 25               | 0900         | 12.7                         |                  |                       | .22                  | 3.4                           | 33.            | 21.            | 26.5           | .1104              | 1.9             | 106.     | .75          |                      | 583.                                      | 18.6           | 0.00     |          |      |      |        |      |
| 26               |              |                              |                  |                       |                      | 3.7                           | 42.            | 28.            | 34.4           | .1342              | 2.4             | 193.     | .72          |                      | 534.                                      | 28.0           | 0.00     |          |      |      |        |      |
| 27               |              |                              |                  |                       |                      | 3.4                           | 49.            | 34.            | 39.4           | .1899              | 4.8             | 68.      | .72          |                      | 675.                                      | 32.0           | .19      |          |      |      |        |      |
| 28               | 1130         | 9.3                          | 3.8              | 10.5                  | .23                  | 3.6                           | 37.            | 30.            | 34.5           | .1471              | 2.6             | 108.     | .70          |                      | 626.                                      | 31.4           | .32      |          |      |      |        |      |
| 29               | 0900         | 13.6                         | 4.3              | 14.8                  | .13                  | 3.7                           | 32.            | 24.            | 29.2           | .1416              | 1.7             | 88.      | .86          |                      | 611.                                      | 26.2           | .12      |          |      |      |        |      |
| 30               | 0900         | 13.0                         | 4.0              | 14.2                  | .13                  | 3.7                           | 40.            | 25.            | 30.5           | .1433              | 2.2             | 213.     | .80          |                      | 503.                                      | 22.0           | 0.00     |          |      |      |        |      |
| 31               | 0900         | 12.2                         |                  |                       | .17                  | 3.6                           | 45.            | 12.            | 32.0           | .1251              | 4.8             | 169.     | .80          |                      | 564.                                      |                | .15      |          |      |      |        |      |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |              | 24.                  | 6.                                        | 15.6           | 13.7     | 2.5      | 115. | 504. | TOTAL= | 3.14 |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR P.PRESSURE(ATP) Q1=INCOMING SOLAR RADIATION Q<sub>A</sub>=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW Q<sub>R</sub>=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, OANVILLE, VERMONT-- 2/74

| OAY              | OBS. TIME | DEPTH SNOW STAKE IN | SNOW SUR. OEN. | PILLOW WE AT 2400 IN | MAX TA F | MIN TA F | AVE TA F | AVE EA IN.HG | AVE U MPH | Q1 LY | ALBEDO | Q1 LY | ANOFPERSON BAKER OA LY | AVE TS F | PX IN | PO IN |
|------------------|-----------|---------------------|----------------|----------------------|----------|----------|----------|--------------|-----------|-------|--------|-------|------------------------|----------|-------|-------|
| 1                | 0900      | 12.0                | .22            | 3.3                  | 7.       | 0.       | 3.0      | .0260        | 5.9       | 251.  | .73    | 251.  | 34.9.                  | .3       | 0.00  |       |
| 2                |           |                     |                | 3.4                  | 3.       | -6.      | -1.8     | .0205        | 2.0       | 186.  | .72    | 186.  | 40.4.                  | -6.5     | 0.00  |       |
| 3                |           |                     |                | 4.1                  | 10.      | -13.     | -2.2     | .0193        | 2.4       | 210.  | .74    | 210.  | 38.2.                  | -7.1     | 0.00  |       |
| 4                | 0900      | 10.5                | .26            | 3.0                  | 8.       | -8.      | -1.1     | .0258        | 3.2       | 230.  | .73    | 230.  | 36.9.                  | -5.4     | 0.00  |       |
| 5                | 0900      | 10.3                | .31            | 1.3                  | -0.      | -7.      | -3.8     | .0261        | 6.0       | 194.  | .76    | 194.  | 39.6.                  | -5.5     | 0.00  |       |
| 6                | 0900      | 10.5                | .25            | 2.7                  | 19.      | -3.      | 7.5      | .0387        | 4.1       | 261.  | .74    | 261.  | 37.5.                  | 1.2      | 0.00  |       |
| 7                | 0900      | 15.2                | .04            | 3.7                  | 21.      | -0.      | 14.1     | .0745        | 2.3       | 123.  | .87    | 123.  | 527.                   | 8.2      | .35   |       |
| 8                |           |                     |                | 4.0                  | 16.      | -7.      | 5.9      | .0451        | 1.5       | 257.  | .75    | 257.  | 38.2.                  | -10.9    | 0.00  |       |
| 9                |           |                     |                | 3.3                  | 12.      | -3.      | 5.2      | .0401        | 3.6       | 265.  | .80    | 265.  | 37.3.                  | -8.7     | 0.00  |       |
| 10               |           |                     |                | 3.6                  | 16.      | -12.     | 4.3      | .0366        | 1.7       | 283.  | .79    | 283.  | 35.3.                  | -10.8    | 0.00  |       |
| 11               |           |                     |                | 3.8                  | 20.      | 10.      | 13.7     | .0741        | 2.2       | 110.  | .85    | 110.  | 53.5.                  | 8.4      | .19   |       |
| 12               | 0900      | 17.0                | .04            | 3.9                  | 21.      | -0.      | 13.2     | .0661        | 2.0       | 269.  | .82    | 269.  | 41.4.                  | 2.5      | .02   |       |
| 13               | 0900      | 15.0                | .11            | 4.2                  | 39.      | 13.      | 28.1     | .1210        | 3.0       | 131.  | .82    | 131.  | 59.6.                  | 23.2     | .02   |       |
| 14               | 0900      | 14.0                | .13            | 3.4                  | 23.      | -9.      | .8       | .0290        | 4.5       | 314.  | .80    | 314.  | 31.9.                  | -8.0     | .02   |       |
| 15               | 0900      | 14.0                | .14            | 3.7                  | 10.      | -13.     | .1       | .0243        | 3.3       | 322.  | .78    | 322.  | 311.                   | -16.1    | 0.00  |       |
| 16               |           |                     |                | 4.2                  | 20.      | -5.      | 8.6      | .0337        | 1.7       | 184.  | .79    | 184.  | 47.4.                  | -2.1     | 0.00  |       |
| 17               | 1400      | 14.5                | .13            | 4.2                  | 27.      | 11.      | 19.4     | .0814        | 3.1       | 158.  | .81    | 158.  | 54.2.                  | 14.3     | .07   |       |
| 18               | 0900      | 14.3                | .14            | 3.9                  | 19.      | 1.       | 12.4     | .0620        | 4.4       | 297.  | .80    | 297.  | 40.2.                  | 2.5      | .03   |       |
| 19               | 0900      | 21.8                | .13            | 5.0                  | 27.      | 2.       | 17.8     | .0920        | 2.1       | 92.   | .87    | 92.   | 56.4.                  | 14.2     | .83   |       |
| 20               | 0900      |                     |                | 4.4                  | 33.      | 22.      | 28.7     | .1488        | 4.8       | 50.   | .88    | 50.   | 62.9.                  | 27.8     | .02   |       |
| 21               | 0900      | 21.8                | .13            | 4.7                  | 30.      | 18.      | 22.3     | .0954        | 3.6       | 315.  | .79    | 315.  | 43.9.                  | 11.1     | 0.00  |       |
| 22               | 0900      | 21.8                | .20            | 5.5                  | 40.      | 21.      | 31.5     | .1624        | 2.2       | 19.   | .84    | 19.   | 64.7.                  | 26.5     | 1.45  |       |
| 23               | 1400      | 18.8                | .20            | 5.3                  | 37.      | 7.       | 19.8     | .1014        | 4.8       | 182.  | .89    | 182.  | 53.7.                  | M        | .37   |       |
| 24               |           |                     |                | 5.3                  | 17.      | 1.       | 7.8      | .0559        | 3.4       | 358.  | .80    | 358.  | 34.4.                  | M        | .01   |       |
| 25               | 0900      | 19.5                | .21            | 5.2                  | 24.      | 8.       | 15.9     | .0798        | 2.2       | 183.  | .81    | 183.  | 52.0.                  | M        | 0.00  |       |
| 26               | 0900      | 19.3                | .20            | 5.1                  | 20.      | 6.       | 12.7     | .0591        | 4.3       | 350.  | .78    | 350.  | 38.0.                  | M        | 0.00  |       |
| 27               | 0900      | 19.3                | .21            | 5.2                  | 31.      | 2.       | 18.9     | .0684        | 2.6       | 368.  | .77    | 368.  | 39.1.                  | M        | 0.00  |       |
| 28               | 0900      | 19.2                | .21            | 5.6                  | 40.      | 17.      | 30.3     | .1068        | 2.4       | 176.  | .78    | 176.  | 59.7.                  | M        | 0.00  |       |
| MONTHLY AVERAGE= |           |                     |                |                      |          |          |          |              |           |       | .79    | 219.  | 448.                   | TOTAL=   | 3.58  |       |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QH=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-APS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 3/74

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUF.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | ALBEDO<br>LY | QA<br>LY | BAKER<br>QA<br>LY | ANDERSON<br>AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|--------------|----------|-------------------|----------------------------|----------|----------|
| 1                | 0900         | 18.3                         | 5.7              | 18.8                  | .23                  | 5.2                           | 41.            | 23.            | 31.5           | .1265              | 3.7             | .75          |          | 595.              | 23.0                       | 0.00     |          |
| 2                |              |                              |                  |                       |                      | 5.2                           | 29.            | 12.            | 23.5           | .0966              | 2.0             | .76          |          | 570.              | 28.4                       | .15      |          |
| 3                |              |                              |                  |                       |                      | 5.6                           | 33.            | 24.            | 27.1           | .1296              | 5.0             | .90          |          | 623.              | 14.6                       | .01      |          |
| 4                | 0900         | 18.0                         | 5.8              | 17.9                  | .23                  | 6.1                           | 48.            | 34.            | 39.3           | .1984              | 2.2             | .74          |          | 670.              | 16.6                       | .11      |          |
| 5                | 0900         | 15.3                         | 5.0              | 14.1                  | .41                  | 5.1                           | 46.            | 32.            | 38.8           | .1797              | 3.8             | .72          |          | 661.              | 28.0                       | .61      |          |
| 6                | 0900         | 13.7                         | 5.5              | 13.8                  | .38                  | 5.0                           | 50.            | 25.            | 37.6           | .1370              | 3.4             | .68          |          | 523.              | 23.0                       | 0.00     |          |
| 7                | 0900         | 12.3                         | 4.6              | 11.9                  | .35                  | 4.6                           | 55.            | 30.            | 42.2           | .1588              | 4.5             | .64          |          | 619.              | 28.4                       | 0.00     |          |
| 8                | 0900         | 10.0                         | 4.2              | 9.8                   | .34                  | 3.6                           | 28.            | 15.            | 20.6           | .0560              | 4.9             | .65          |          | 453.              | 14.6                       | 0.00     |          |
| 9                |              |                              |                  |                       |                      | 3.8                           | 23.            | 13.            | 19.8           | .0632              | 2.4             | .72          |          | 576.              | 16.6                       | 0.00     |          |
| 10               |              |                              |                  |                       |                      | 2.6                           | 27.            | 15.            | 20.2           | .0955              | 7.2             | .85          |          | 566.              | 17.4                       | .25      |          |
| 11               |              |                              |                  |                       |                      | 3.5                           | 22.            | 11.            | 16.8           | .0671              | 6.4             | .73          |          | 498.              | 9.2                        | .03      |          |
| 12               | 0900         | 10.0                         |                  |                       | .34                  | 4.2                           | 14.            | 3.             | 9.0            | .0337              | 7.3             | .70          |          | 340.              | 1.0                        | 0.00     |          |
| 13               | 0900         | 10.0                         |                  |                       | .34                  | 4.1                           | 15.            | 0.             | 7.0            | .0365              | 7.5             | .74          |          | 444.              | 5.8                        | 0.00     |          |
| 14               | 0900         | 10.5                         | 3.8              | 9.6                   | .30                  | 3.1                           | 24.            | 10.            | 17.0           | .0596              | 6.5             | .73          |          | 391.              | 13.1                       | .02      |          |
| 15               | 0900         | 10.0                         | 3.9              | 9.7                   | .30                  | 3.1                           | 33.            | 10.            | 22.9           | .0564              | 3.2             | .68          |          | 454.              | 14.7                       | 0.00     |          |
| 16               |              |                              |                  |                       |                      | 5.2                           | 33.            | 23.            | 27.9           | .1260              | 1.6             | .88          |          | 627.              | 24.9                       | 1.16     |          |
| 17               |              |                              |                  |                       |                      | 6.0                           | 33.            | 16.            | 26.0           | .1217              | 5.1             | .89          |          | 610.              | 23.4                       | .93      |          |
| 18               | 0900         | 20.0                         | 6.0              | 20.5                  | .07                  | 5.3                           | 22.            | 9.             | 17.5           | .0756              | 5.2             | .86          |          | 500.              | 10.0                       | .07      |          |
| 19               | 0900         | 20.2                         | 5.8              | 20.1                  | .16                  | 5.3                           | 30.            | 9.             | 23.2           | .1083              | 3.3             | .88          |          | 591.              | 18.7                       | 0.00     |          |
| 20               | 0900         | 20.5                         | 5.9              | 20.5                  | .11                  | 5.3                           | 19.            | 3.             | 11.8           | .0511              | 3.4             | .82          |          | 346.              | -2.8                       | 0.00     |          |
| 21               | 0900         | 20.5                         | 5.9              | 20.4                  | .11                  | 6.5                           | 24.            | 8.             | 17.5           | .0880              | 2.6             | .90          |          | 574.              | 13.4                       | 1.26     |          |
| 22               | 0900         | 28.0                         | 7.2              | 27.9                  | .15                  | 6.1                           | 25.            | 5.             | 18.0           | .0790              | 4.1             | .88          |          | 531.              | 8.3                        | .02      |          |
| 23               |              |                              |                  |                       |                      | 6.6                           | 43.            | 6.             | 31.1           | .1126              | 5.3             | .81          |          | 512.              | 20.8                       | 0.00     |          |
| 24               |              |                              |                  |                       |                      | 6.6                           | 37.            | 6.             | 25.0           | .1102              | 5.5             | .82          |          | 585.              | 20.6                       | .28      |          |
| 25               | 0900         | 23.8                         | 7.1              | 23.3                  | .19                  | 6.2                           | 15.            | 3.             | 8.0            | .0357              | 4.6             | .77          |          | 326.              | -1.0                       | .01      |          |
| 26               | 0900         | 23.3                         | 7.1              | 23.1                  | .20                  | 6.1                           | 33.            | 5.             | 20.5           | .0689              | 4.2             | .80          |          | 562.              | 14.4                       | .08      |          |
| 27               | 0900         | 23.8                         | 7.0              | 22.9                  | .22                  | 5.8                           | 25.            | 7.             | 16.6           | .0604              | 5.1             | .81          |          | 420.              | 11.6                       | 0.00     |          |
| 28               | 0900         | 24.2                         | 7.0              | 22.7                  | .19                  | 5.8                           | 18.            | -6.            | 10.2           | .0467              | 4.6             | .79          | 416.     | 341.              | 6.0                        | .05      |          |
| 29               | 0900         | 23.2                         | 7.0              | 22.2                  | .22                  | 5.8                           | 28.            | -8.            | 12.3           | .0356              | 2.1             | .78          | 420.     | 342.              | 2.2                        | 0.00     |          |
| 30               |              |                              |                  |                       |                      | 6.4                           | 34.            | 20.            | 26.9           | .1079              | 3.5             | .86          | 594.     | 589.              | 24.0                       | .13      |          |
| 31               |              |                              |                  |                       |                      | 6.3                           | 44.            | 31.            | 35.0           | .1819              | 5.2             | .79          | 653.     | 629.              | 32.0                       | .07      |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |              |          |                   |                            | 5.24     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PPESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PQ=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOUR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VFRMONT-- 4/74

| DAY              | OBS. TIME | DEPTH SNOW STAKE IN | SNOW WE IN | COURSE IN | SNOW SUR. DEN. | PILLOW WE AT 2400 IN | MIN TA F | AVE TA F | AVE IN.HG | AVE U MPH | QI LY | ALREDO LY | Q4 LY | ANDERSON BAKER OA LY | AVE TS F | PX IN  | PO IN |
|------------------|-----------|---------------------|------------|-----------|----------------|----------------------|----------|----------|-----------|-----------|-------|-----------|-------|----------------------|----------|--------|-------|
| 1                | 0900      | 22.2                | 6.7        | 21.3      | .24            | 5.9                  | 20.      | 34.      | .1351     | 5.1       | 128.  | .86       | 585.  | 627.                 | 25.0     | .12    |       |
| 2                |           |                     |            |           |                | 6.2                  | 18.      | 36.      | .1538     | 2.3       | 41.   | .78       | 621.  | 642.                 | 26.5     | .31    |       |
| 3                | 0900      | 21.7                | 7.0        | 20.7      | .32            | 6.8                  | 34.      | 37.      | .2067     | 2.8       | 469.  | .76       | 729.  | 726.                 | 30.7     | 0.00   |       |
| 4                | 0900      | 15.5                | 6.2        | 15.0      | .34            | 6.2                  | 40.      | 55.      | .3303     | 3.1       | 159.  | .76       | 729.  | 726.                 | 31.7     | .06    |       |
| 5                | 0900      | 12.2                | 6.1        | 13.3      | .36            | 5.3                  | 34.      | 47.      | .2536     | 2.2       | 44.   | .75       | 674.  | 700.                 | 31.7     | .31    |       |
| 6                |           |                     |            |           |                | 4.7                  | 25.      | 34.      | .1365     | 4.8       | 141.  | .74       | 605.  | 628.                 | 29.8     | .07    |       |
| 7                |           |                     |            |           |                | 4.6                  | 18.      | 44.      | .1124     | 3.1       | 219.  | .75       | 571.  | 615.                 | 24.0     | .32    |       |
| 8                | 0900      | 12.6                | 5.5        | 12.9      | .16            | 4.4                  | 18.      | 29.      | .0964     | 2.1       | 318.  | .84       | 553.  | 536.                 | 20.3     | .04    |       |
| 9                | 1000      | 16.3                |            |           | .15            | 4.9                  | 14.      | 20.      | .0869     | 3.3       | 60.   | .90       | 559.  | 582.                 | 19.2     | 1.01   |       |
| 10               | 1100      | 20.8                | 5.6        | 17.5      | .13            | 4.4                  | 13.      | 26.      | .0931     | 5.2       | 264.  | .86       | 551.  | 548.                 | 18.0     | .03    |       |
| 11               | 0900      | 19.6                |            |           | .14            | 4.1                  | 19.      | 40.      | .0971     | 3.9       | 491.  | .79       | 527.  | 489.                 | 16.5     | 0.00   |       |
| 12               | 0900      | 18.0                | 6.1        | 17.0      | .31            | 4.3                  | 21.      | 44.      | .1142     | 1.5       | 327.  | .75       | 607.  | 597.                 | 22.6     | .03    |       |
| 13               |           |                     |            |           |                | 4.6                  | 34.      | 37.      | .1785     | 3.0       | 89.   | .81       | 655.  | 662.                 | 31.7     | .12    |       |
| 14               |           |                     |            |           |                | 5.4                  | 33.      | 58.      | .2327     | 2.1       | 405.  | .67       | 691.  | 616.                 | 31.5     | .41    |       |
| 15               | 0900      | 10.0                | 5.7        | 11.0      | .36            | 4.2                  | 34.      | 48.      | .2017     | 4.4       | 115.  | .64       | 679.  | 688.                 | 31.7     | .15    |       |
| 16               | 0900      | 9.7                 |            |           | .35            | 3.0                  | 30.      | 36.      | .1354     | 5.8       | 202.  | .74       | 589.  | 630.                 | 27.9     | .04    |       |
| 17               | 0900      | 9.0                 | 4.7        | 9.0       | .35            | 2.0                  | 28.      | 56.      | .1185     | 4.1       | 610.  | .60       | 558.  | 479.                 | 26.5     | 0.00   |       |
| 18               |           |                     |            |           |                | .9                   | 31.      | 50.      | .1496     | 3.7       | 422.  | .55       | 593.  | 591.                 | 30.2     | 0.00   |       |
| 19               | 0900      | 6.0                 | 2.6        | 6.6       | .46            | .8                   | 24.      | 40.      | .0866     | 3.6       | 625.  | .53       | 486.  | 430.                 | 25.5     | 0.00   |       |
| 20               |           |                     |            |           |                | .7                   | 21.      | 46.      | .0749     | 2.5       | 595.  | .50       | 535.  | 459.                 | 26.1     | 0.00   |       |
| 21               |           |                     |            |           |                | .5                   | 29.      | 61.      | .1274     | 2.2       | 458.  | .38       | 641.  | 597.                 | 30.0     | 0.00   |       |
| 22               | 0950      | 0.0                 |            |           |                | .2                   | 40.      | 65.      | .2444     | 2.2       | 268.  | .25       | 732.  | 702.                 | 32.0     | .32    |       |
| 23               | 1030      | 0.0                 |            |           |                | 0.0                  | 37.      | 54.      | .2842     | 3.1       | 204.  | .19       | 711.  | 704.                 | 32.0     | .30    |       |
| 24               | 1100      | 7.0                 |            |           | .13            | .4                   | 28.      | 36.      | .1652     | 3.7       | 242.  | .86       | 640.  | 622.                 | 29.6     | 1.04   |       |
| 25               | 0900      | 4.0                 |            |           | .20            | .6                   | 25.      | 43.      | .1344     | 2.3       | 618.  | .74       | 594.  | 459.                 | 23.2     | 0.00   |       |
| 26               |           |                     |            |           |                | .5                   | 32.      | 41.      | .1671     | 3.4       | 193.  | .73       | 623.  | 653.                 | 30.6     | 0.00   |       |
| 27               |           |                     |            |           |                | 0.0                  | 32.      | 60.      | .1831     | 3.4       | 627.  | .45       | 616.  | 506.                 | 30.0     | 0.00   |       |
| 28               |           |                     |            |           |                | 0.0                  | 38.      | 52.7     | .2662     | 2.1       | 475.  | .21       | 725.  | 644.                 | 32.0     | 0.00   |       |
| 29               | 1150      | 0.0                 |            |           |                | 0.0                  | 47.      | 55.9     | .4133     | 2.3       | 216.  | .19       | 768.  | 762.                 | M        | .37    |       |
| 30               |           |                     |            |           |                | 0.0                  | 46.      | 65.      | .3092     | 2.7       | 505.  | .21       | 645.  | 646.                 | M        | .06    |       |
| MONTHLY AVERAGE= |           |                     |            |           |                |                      |          |          |           |           |       |           |       |                      | 603.     | TOTAL= | 5.15  |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) QI=INCOMING SOLAR RADIATION Q4=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QN=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 5/74

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>COURSE<br>WE<br>IN | SNOW<br>SUR.<br>DEN.<br>IN | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------------|----------------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                            |                            |                               | 52.            | 25.            | 42.1           | .1525              | 8.3             | 422.     |              | 613.     |                               |                | .47      |          |
| 2                |              |                              |                            |                            |                               | 46.            | 20.            | 32.2           | .0644              | 4.2             | 664.     |              | 426.     |                               |                | 0.00     |          |
| 3                |              |                              |                            |                            |                               | 54.            | 28.            | 40.2           | .1301              | 2.8             | 288.     |              | 653.     |                               |                | .40      |          |
| 4                |              |                              |                            |                            |                               | 38.            | 28.            | 32.8           | .1265              | 5.5             | 300.     |              | 611.     |                               |                | .15      |          |
| 5                |              |                              |                            |                            |                               | 45.            | 24.            | 33.6           | .0844              | 3.3             | 682.     |              | 435.     |                               |                | 0.00     |          |
| 6                |              |                              |                            |                            |                               | 45.            | 29.            | 37.4           | .1347              | 3.9             | 152.     |              | 668.     |                               |                | .12      |          |
| 7                |              |                              |                            |                            |                               | 42.            | 32.            | 36.0           | .1583              | 2.7             | 254.     |              | 641.     |                               |                | .20      |          |
| 8                |              |                              |                            |                            |                               | 45.            | 31.            | 36.9           | .1471              | 2.9             | 347.     |              | 619.     |                               |                | 0.00     |          |
| 9                |              |                              |                            |                            |                               | 56.            | 35.            | 44.7           | .1909              | 4.0             | 230.     |              | 694.     |                               |                | .02      |          |
| 10               |              |                              |                            |                            |                               | 41.            | 37.            | 39.3           | .2316              | 1.7             | 46.      |              | 689.     |                               |                | .46      |          |
| 11               |              |                              |                            |                            |                               | 52.            | 38.            | 42.5           | .2155              | 2.1             | 275.     |              | 673.     |                               |                | 0.00     |          |
| 12               |              |                              |                            |                            |                               | 46.            | 41.            | 44.0           | .2528              | 4.2             | 69.      |              | 714.     |                               |                | .91      |          |
| 13               |              |                              |                            |                            |                               | 50.            | 41.            | 45.5           | .2649              | 3.2             | 167.     |              | 712.     |                               |                | .08      |          |
| 14               |              |                              |                            |                            |                               | 67.            | 40.            | 53.2           | .2365              | 4.2             | 540.     |              | 629.     |                               |                | 0.00     |          |
| 15               |              |                              |                            |                            |                               | 83.            | 48.            | 62.6           | .3116              | 3.9             | 567.     |              | 670.     |                               |                | .08      |          |
| 16               |              |                              |                            |                            |                               | 59.            | 49.            | 53.4           | .2088              | 3.5             | 445.     |              | 676.     |                               |                | 0.00     |          |
| 17               |              |                              |                            |                            |                               | 59.            | 42.            | 51.2           | .2967              | 3.2             | 73.      |              | 756.     |                               |                | .20      |          |
| 18               |              |                              |                            |                            |                               | 58.            | 36.            | 47.4           | .1843              | 5.1             | 628.     |              | 553.     |                               |                | 0.00     |          |
| 19               |              |                              |                            |                            |                               | 52.            | 29.            | 42.1           | .1365              | 4.6             | 717.     |              | 477.     |                               |                | 0.00     |          |
| 20               |              |                              |                            |                            |                               | 54.            | 33.            | 42.6           | .1269              | 4.3             | 732.     |              | 479.     |                               |                | 0.00     |          |
| 21               |              |                              |                            |                            |                               | 56.            | 34.            | 47.5           | .1627              | 1.3             | 315.     |              | 691.     |                               |                | 0.00     |          |
| 22               |              |                              |                            |                            |                               | 67.            | 47.            | 55.2           | .2874              | 1.2             | 243.     |              | 755.     |                               |                | .14      |          |
| 23               |              |                              |                            |                            |                               | 50.            | 43.            | 45.5           | .2740              | 3.5             | 52.      |              | 724.     |                               |                | 1.47     |          |
| 24               |              |                              |                            |                            |                               | 51.            | 42.            | 46.0           | .2842              | 2.4             | 141.     |              | 719.     |                               |                | .53      |          |
| 25               |              |                              |                            |                            |                               | 52.            | 44.            | 47.5           | .2861              | 1.6             | 285.     |              | 701.     |                               |                | .42      |          |
| 26               |              |                              |                            |                            |                               | 44.            | 41.            | 42.6           | .2512              | 2.1             | 122.     |              | 702.     |                               |                | .75      |          |
| 27               |              |                              |                            |                            |                               | 54.            | 40.            | 44.4           | .2528              | 1.7             | 280.     |              | 685.     |                               |                | .11      |          |
| 28               |              |                              |                            |                            |                               | 54.            | 42.            | 47.4           | .2475              | 3.4             | 346.     |              | 684.     |                               |                | .07      |          |
| 29               |              |                              |                            |                            |                               | 47.            | 44.            | 45.4           | .2692              | .7              | 79.      |              | 722.     |                               |                | .09      |          |
| 30               |              |                              |                            |                            |                               | 57.            | 43.            | 49.2           | .2744              | 1.4             | 283.     |              | 712.     |                               |                | 0.00     |          |
| 31               |              |                              |                            |                            |                               | 61.            | 42.            | 52.6           | .3029              | 4.3             | 214.     |              | 747.     |                               |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                            |                            |                               | 53.            | 37.            | 44.6           | 35.9               | 3.3             | 321.     |              | 653.     |                               | TOTAL=         | 6.67     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOUR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.



DAILY SUMMARY OF DATA--NOAA-APS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 6/74

| DAY              | OBS. TIME | DEPTH SNOW STAKE IN | SNOW WE IN | COURSE DEPTH IN | SNOW SUR. DEN. | PILLOW WE AT 2400 IN | MAX TA F | MIN TA F | AVE TA F | AVE EA IN.HG | AVE U MPH | Q1 LY | ALBEDO LY | Q1 LY | ANDERSON BAKER QA LY | AVE TS F | PX IN | PO IN |
|------------------|-----------|---------------------|------------|-----------------|----------------|----------------------|----------|----------|----------|--------------|-----------|-------|-----------|-------|----------------------|----------|-------|-------|
| 1                |           |                     |            |                 |                |                      | 65.      | 46.      | 55.9     | .2806        | 3.3       | 523.  |           |       | 666.                 |          | .33   |       |
| 2                |           |                     |            |                 |                |                      | 66.      | 45.      | 56.8     | .2304        | 2.4       | 535.  |           |       | 664.                 |          | 0.00  |       |
| 3                |           |                     |            |                 |                |                      | 70.      | 42.      | 54.8     | .2483        | 2.9       | 592.  |           |       | 626.                 |          | 0.00  |       |
| 4                |           |                     |            |                 |                |                      | 71.      | 42.      | 58.0     | .2820        | 2.4       | 621.  |           |       | 629.                 |          | 0.00  |       |
| 5                |           |                     |            |                 |                |                      | 78.      | 50.      | 66.1     | .3615        | 3.0       | 594.  |           |       | 691.                 |          | 0.00  |       |
| 6                |           |                     |            |                 |                |                      | 73.      | 53.      | 62.5     | .3677        | 2.5       | 504.  |           |       | 715.                 |          | 0.00  |       |
| 7                |           |                     |            |                 |                |                      | 70.      | 44.      | 57.6     | .1779        | 3.6       | 696.  |           |       | 579.                 |          | 0.00  |       |
| 8                |           |                     |            |                 |                |                      | 78.      | 41.      | 62.0     | .3156        | 2.9       | 677.  |           |       | 621.                 |          | 0.00  |       |
| 9                |           |                     |            |                 |                |                      | 77.      | 62.      | 68.8     | .4686        | 3.3       | 543.  |           |       | 737.                 |          | 0.00  |       |
| 10               |           |                     |            |                 |                |                      | 84.      | 59.      | 71.9     | .5234        | 2.3       | 500.  |           |       | 777.                 |          | 0.00  |       |
| 11               |           |                     |            |                 |                |                      | 68.      | 51.      | 61.3     | .4101        | 3.0       | 271.  |           |       | 788.                 |          | .10   |       |
| 12               |           |                     |            |                 |                |                      | 62.      | 38.      | 52.6     | .2487        | 2.4       | 491.  |           |       | 664.                 |          | 0.00  |       |
| 13               |           |                     |            |                 |                |                      | 67.      | 38.      | 54.6     | .2227        | 4.0       | 702.  |           |       | 565.                 |          | .01   |       |
| 14               |           |                     |            |                 |                |                      | 67.      | 45.      | 54.5     | .2874        | 2.4       | 464.  |           |       | 686.                 |          | .01   |       |
| 15               |           |                     |            |                 |                |                      | 70.      | 44.      | 57.4     | .2727        | 3.0       | 659.  |           |       | 608.                 |          | 0.00  |       |
| 16               |           |                     |            |                 |                |                      | 61.      | 49.      | 56.1     | .3510        | 1.7       | 148.  |           |       | 778.                 |          | .13   |       |
| 17               |           |                     |            |                 |                |                      | 70.      | 56.      | 61.8     | .4693        | 1.8       | 238.  |           |       | 799.                 |          | 1.74  |       |
| 18               |           |                     |            |                 |                |                      | 70.      | 48.      | 58.8     | .3610        | 2.0       | 555.  |           |       | 673.                 |          | .03   |       |
| 19               |           |                     |            |                 |                |                      | 71.      | 48.      | 59.6     | .3735        | 2.3       | 411.  |           |       | 738.                 |          | .02   |       |
| 20               |           |                     |            |                 |                |                      | 72.      | 54.      | 62.7     | .3858        | 2.5       | 548.  |           |       | 699.                 |          | .08   |       |
| 21               |           |                     |            |                 |                |                      | 67.      | 54.      | 60.0     | .4127        | 1.9       | 265.  |           |       | 782.                 |          | .02   |       |
| 22               |           |                     |            |                 |                |                      | 68.      | 52.      | 58.2     | .3615        | 2.9       | 457.  |           |       | 712.                 |          | 0.00  |       |
| 23               |           |                     |            |                 |                |                      | 67.      | 50.      | 57.4     | .3236        | 3.6       | 534.  |           |       | 674.                 |          | 0.00  |       |
| 24               |           |                     |            |                 |                |                      | 68.      | 48.      | 57.4     | .3387        | 2.4       | 486.  |           |       | 695.                 |          | .17   |       |
| 25               |           |                     |            |                 |                |                      | 62.      | 51.      | 56.0     | .3483        | 1.4       | 323.  |           |       | 743.                 |          | .08   |       |
| 26               |           |                     |            |                 |                |                      | 53.      | 49.      | 50.7     | .3381        | 1.2       | 120.  |           |       | 749.                 |          | .48   |       |
| 27               |           |                     |            |                 |                |                      | 64.      | 47.      | 53.8     | .3413        | .9        | 344.  |           |       | 724.                 |          | .13   |       |
| 28               |           |                     |            |                 |                |                      | 69.      | 45.      | 57.2     | .3097        | 1.9       | 683.  |           |       | 595.                 |          | 0.00  |       |
| 29               |           |                     |            |                 |                |                      | 67.      | 52.      | 58.0     | .3402        | 2.6       | 274.  |           |       | 767.                 |          | 0.00  |       |
| 30               |           |                     |            |                 |                |                      | 74.      | 53.      | 61.9     | .3990        | 2.9       | 383.  |           |       | 760.                 |          | .28   |       |
| MONTHLY AVERAGE= |           |                     |            |                 |                |                      |          |          |          |              |           |       |           |       | 697.                 | TOTAL=   | 3.61  |       |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION<sup>1)</sup>  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 7/74

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | Q1<br>LY | ALBEDO<br>LY | Q1<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                  |                       |                      |                              | 69.            | 49.            | 59.1           | .3881              | 3.6             | 497.     |              |          | 699.                          |                | .51      |          |
| 2                |              |                              |                  |                       |                      |                              | 68.            | 49.            | 60.2           | .4750              | 1.5             | 303.     |              |          | 774.                          |                | .02      |          |
| 3                |              |                              |                  |                       |                      |                              | 73.            | 58.            | 67.4           | .6169              | 3.0             | 327.     |              |          | 812.                          |                | 0.00     |          |
| 4                |              |                              |                  |                       |                      |                              | 77.            | 61.            | 67.7           | .6388              | 3.0             | 379.     |              |          | 799.                          |                | 1.00     |          |
| 5                |              |                              |                  |                       |                      |                              | 65.            | 61.            | 63.0           | .5627              | 2.4             | 109.     |              |          | 826.                          |                | 0.00     |          |
| 6                |              |                              |                  |                       |                      |                              | 72.            | 55.            | 62.5           | .4339              | 2.8             | 634.     |              |          | 650.                          |                | 0.00     |          |
| 7                |              |                              |                  |                       |                      |                              | 76.            | 61.            | 68.1           | .5367              | 4.1             | 613.     |              |          | 695.                          |                | .24      |          |
| 8                |              |                              |                  |                       |                      |                              | 79.            | 59.            | 69.7           | .5618              | 2.2             | 523.     |              |          | 751.                          |                | 0.00     |          |
| 9                |              |                              |                  |                       |                      |                              | 81.            | 65.            | 71.7           | .5777              | 3.6             | 429.     |              |          | 804.                          |                | .57      |          |
| 10               |              |                              |                  |                       |                      |                              | 74.            | 51.            | 64.2           | .4120              | 4.1             | 595.     |              |          | 678.                          |                | .13      |          |
| 11               |              |                              |                  |                       |                      |                              | 64.            | 50.            | 55.1           | .3082              | 5.1             | 535.     |              |          | 655.                          |                | .18      |          |
| 12               |              |                              |                  |                       |                      |                              | 69.            | 51.            | 59.2           | .2916              | 3.6             | 702.     |              |          | 583.                          |                | 0.00     |          |
| 13               |              |                              |                  |                       |                      |                              | 77.            | 52.            | 67.1           | .3478              | 3.6             | 713.     |              |          | 618.                          |                | 0.00     |          |
| 14               |              |                              |                  |                       |                      |                              | 83.            | 58.            | 71.0           | .5226              | 2.3             | 620.     |              |          | 704.                          |                | 0.00     |          |
| 15               |              |                              |                  |                       |                      |                              | 73.            | 60.            | 65.1           | .4722              | 3.7             | 283.     |              |          | 808.                          |                | .67      |          |
| 16               |              |                              |                  |                       |                      |                              | 66.            | 45.            | 58.0           | .2757              | 2.6             | 533.     |              |          | 669.                          |                | 0.00     |          |
| 17               |              |                              |                  |                       |                      |                              | 69.            | 44.            | 58.5           | .2888              | 3.2             | 677.     |              |          | 592.                          |                | 0.00     |          |
| 18               |              |                              |                  |                       |                      |                              | 74.            | 55.            | 64.3           | .4133              | 2.5             | 429.     |              |          | 754.                          |                | .02      |          |
| 19               |              |                              |                  |                       |                      |                              | 70.            | 53.            | 61.7           | .4616              | 3.4             | 222.     |              |          | 800.                          |                | .84      |          |
| 20               |              |                              |                  |                       |                      |                              | 65.            | 49.            | 56.4           | .2981              | 4.8             | 644.     |              |          | 599.                          |                | 0.00     |          |
| 21               |              |                              |                  |                       |                      |                              | 70.            | 48.            | 59.0           | .3221              | 3.0             | 600.     |              |          | 638.                          |                | 0.00     |          |
| 22               |              |                              |                  |                       |                      |                              | 70.            | 47.            | 58.9           | .3440              | 1.0             | 568.     |              |          | 655.                          |                | 0.00     |          |
| 23               |              |                              |                  |                       |                      |                              | 73.            | 50.            | 62.1           | .4076              | 1.3             | 454.     |              |          | 728.                          |                | 0.00     |          |
| 24               |              |                              |                  |                       |                      |                              | 66.            | 54.            | 60.0           | .4120              | 1.6             | 416.     |              |          | 731.                          |                | .05      |          |
| 25               |              |                              |                  |                       |                      |                              | 70.            | 51.            | 59.9           | .3717              | 1.1             | 577.     |              |          | 655.                          |                | 0.00     |          |
| 26               |              |                              |                  |                       |                      |                              | 71.            | 49.            | 61.3           | .3893              | 1.3             | 532.     |              |          | 685.                          |                | 0.00     |          |
| 27               |              |                              |                  |                       |                      |                              | 68.            | 58.            | 62.4           | .4829              | 2.0             | 216.     |              |          | 805.                          |                | 0.00     |          |
| 28               |              |                              |                  |                       |                      |                              | 70.            | 55.            | 63.2           | .5088              | 1.8             | 246.     |              |          | 803.                          |                | .19      |          |
| 29               |              |                              |                  |                       |                      |                              | 73.            | 56.            | 64.6           | .5187              | 3.0             | 430.     |              |          | 753.                          |                | .95      |          |
| 30               |              |                              |                  |                       |                      |                              | 65.            | 54.            | 60.4           | .4851              | 2.2             | 107.     |              |          | 809.                          |                | .94      |          |
| 31               |              |                              |                  |                       |                      |                              | 72.            | 50.            | 60.2           | .4177              | 1.8             | 498.     |              |          | 694.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                              | 71.            | 53.            | 62.7           | 55.1               | 2.8             | 465.     |              |          | 717.                          | TOTAL=         | 6.31     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE, VERMONT-- 8/74

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>SUR.<br>DEN. | SNOW<br>COURSE<br>WE<br>IN | SNOW<br>COURSE<br>DEPTH<br>IN | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | QI<br>LY | ALBEDO | QA<br>LY | ANDERSON<br>BAKER<br>QA<br>LY | AVE<br>TS<br>F | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|----------------------|----------------------------|-------------------------------|----------------|----------------|--------------------|-----------------|----------|--------|----------|-------------------------------|----------------|----------|----------|
| 1                |              |                              |                      |                            |                               | 50.            | 60.7           | .3887              | 2.3             | 515.     |        |          | 684.                          |                | 0.00     |          |
| 2                |              |                              |                      |                            |                               | 51.            | 65.5           | .4439              | 2.2             | 537.     |        |          | 699.                          |                | 0.00     |          |
| 3                |              |                              |                      |                            |                               | 64.            | 70.7           | .5854              | 2.5             | 418.     |        |          | 791.                          |                | 0.00     |          |
| 4                |              |                              |                      |                            |                               | 76.            | 68.5           | .5905              | 2.0             | 246.     |        |          | 835.                          |                | .16      |          |
| 5                |              |                              |                      |                            |                               | 56.            | 61.5           | .4002              | 3.0             | 446.     |        |          | 719.                          |                | 0.00     |          |
| 6                |              |                              |                      |                            |                               | 51.            | 60.4           | .3810              | 2.5             | 577.     |        |          | 643.                          |                | 0.00     |          |
| 7                |              |                              |                      |                            |                               | 51.            | 64.3           | .4158              | 2.9             | 529.     |        |          | 692.                          |                | 0.00     |          |
| 8                |              |                              |                      |                            |                               | 58.            | 65.5           | .4419              | 3.3             | 541.     |        |          | 691.                          |                | 0.00     |          |
| 9                |              |                              |                      |                            |                               | 51.            | 59.0           | .3947              | .9              | 361.     |        |          | 737.                          |                | 0.00     |          |
| 10               |              |                              |                      |                            |                               | 49.            | 58.7           | .3543              | .9              | 602.     |        |          | 612.                          |                | 0.00     |          |
| 11               |              |                              |                      |                            |                               | 47.            | 59.5           | .3627              | .9              | 634.     |        |          | 594.                          |                | 0.00     |          |
| 12               |              |                              |                      |                            |                               | 50.            | 63.0           | .4058              | 1.1             | 620.     |        |          | 622.                          |                | 0.00     |          |
| 13               |              |                              |                      |                            |                               | 52.            | 64.7           | .4332              | 1.1             | 507.     |        |          | 700.                          |                | 0.00     |          |
| 14               |              |                              |                      |                            |                               | 52.            | 61.6           | .4306              | 3.0             | 407.     |        |          | 731.                          |                | 0.00     |          |
| 15               |              |                              |                      |                            |                               | 45.            | 55.2           | .2981              | 2.6             | 629.     |        |          | 565.                          |                | 0.00     |          |
| 16               |              |                              |                      |                            |                               | 44.            | 58.0           | .3097              | 2.0             | 608.     |        |          | 592.                          |                | 0.00     |          |
| 17               |              |                              |                      |                            |                               | 50.            | 60.2           | .4365              | 1.9             | 300.     |        |          | 763.                          |                | 1.04     |          |
| 18               |              |                              |                      |                            |                               | 52.            | 61.3           | .4452              | 1.5             | 373.     |        |          | 742.                          |                | 0.00     |          |
| 19               |              |                              |                      |                            |                               | 53.            | 61.1           | .4254              | 1.8             | 473.     |        |          | 691.                          |                | .05      |          |
| 20               |              |                              |                      |                            |                               | 51.            | 61.1           | .4209              | .6              | 532.     |        |          | 655.                          |                | 0.00     |          |
| 21               |              |                              |                      |                            |                               | 54.            | 64.4           | .4267              | 1.3             | 564.     |        |          | 651.                          |                | 0.00     |          |
| 22               |              |                              |                      |                            |                               | 58.            | 66.8           | .4865              | 2.2             | 450.     |        |          | 734.                          |                | 0.00     |          |
| 23               |              |                              |                      |                            |                               | 57.            | 64.7           | .5096              | 1.4             | 239.     |        |          | 808.                          |                | 0.00     |          |
| 24               |              |                              |                      |                            |                               | 55.            | 64.3           | .4800              | 2.8             | 398.     |        |          | 743.                          |                | .32      |          |
| 25               |              |                              |                      |                            |                               | 47.            | 55.7           | .3077              | 2.1             | 589.     |        |          | 575.                          |                | 0.00     |          |
| 26               |              |                              |                      |                            |                               | 46.            | 58.8           | .3740              | 2.4             | 398.     |        |          | 707.                          |                | 0.00     |          |
| 27               |              |                              |                      |                            |                               | 57.            | 64.2           | .4836              | 3.5             | 235.     |        |          | 804.                          |                | .41      |          |
| 28               |              |                              |                      |                            |                               | 52.            | 60.7           | .3587              | 1.5             | 540.     |        |          | 630.                          |                | 0.00     |          |
| 29               |              |                              |                      |                            |                               | 55.            | 55.7           | .4058              | 1.3             | 53.      |        |          | 784.                          |                | .51      |          |
| 30               |              |                              |                      |                            |                               | 51.            | 57.3           | .4177              | .8              | 145.     |        |          | 782.                          |                | .01      |          |
| 31               |              |                              |                      |                            |                               | 49.            | 61.5           | .4216              | 2.0             | 454.     |        |          | 686.                          |                | 0.00     |          |
| MONTHLY AVERAGE= |              |                              |                      |                            |                               |                |                |                    |                 | 71.      | 52.    | 61.8     | 54.0                          | 1.9            | 449.     |          |
|                  |              |                              |                      |                            |                               |                |                |                    |                 | TOTAL=   |        | 2.50     |                               |                |          |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE (ATP) QI=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW QR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.

DAILY SUMMARY OF DATA--NOAA-ARS SNOW RESEARCH STATION, DANVILLE,VERMONT-- 9/74

| DAY              | OBS.<br>TIME | DEPTH<br>SNOW<br>STAKE<br>IN | SNOW<br>WE<br>IN | COURSE<br>DEPTH<br>IN | SNOW<br>SUR.<br>DEN. | PILLOW<br>WE AT<br>2400<br>IN | MAX<br>TA<br>F | MIN<br>TA<br>F | AVE<br>TA<br>F | AVE<br>EA<br>IN.HG | AVE<br>U<br>MPH | OI<br>LY | ALBEDO<br>LY | QA<br>LY | ANDERSON          |                | PX<br>IN | PO<br>IN |
|------------------|--------------|------------------------------|------------------|-----------------------|----------------------|-------------------------------|----------------|----------------|----------------|--------------------|-----------------|----------|--------------|----------|-------------------|----------------|----------|----------|
|                  |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |              |          | BAKER<br>QA<br>LY | AVE<br>TS<br>F |          |          |
| 1                |              |                              |                  |                       |                      |                               | 66.            | 49.            | 56.8           | .3166              | 2.2             | 465.     |              |          | 646.              |                | .05      |          |
| 2                |              |                              |                  |                       |                      |                               | 63.            | 51.            | 55.7           | .3505              | 1.0             | 357.     |              |          | 699.              |                | 0.00     |          |
| 3                |              |                              |                  |                       |                      |                               | 53.            | 48.            | 50.5           | .3318              | .9              | 52.      |              |          | 752.              |                | .89      |          |
| 4                |              |                              |                  |                       |                      |                               | 51.            | 43.            | 48.1           | .2962              | 2.5             | 123.     |              |          | 730.              |                | .13      |          |
| 5                |              |                              |                  |                       |                      |                               | 63.            | 42.            | 50.4           | .2815              | .9              | 488.     |              |          | 588.              |                | 0.00     |          |
| 6                |              |                              |                  |                       |                      |                               | 62.            | 41.            | 51.6           | .3072              | .5              | 325.     |              |          | 686.              |                | 0.00     |          |
| 7                |              |                              |                  |                       |                      |                               | 66.            | 48.            | 54.3           | .3246              | .6              | 417.     |              |          | 651.              |                | 0.00     |          |
| 8                |              |                              |                  |                       |                      |                               | 68.            | 46.            | 56.4           | .3587              | 1.3             | 441.     |              |          | 646.              |                | 0.00     |          |
| 9                |              |                              |                  |                       |                      |                               | 71.            | 52.            | 61.8           | .4152              | 2.4             | 368.     |              |          | 720.              |                | 0.00     |          |
| 10               |              |                              |                  |                       |                      |                               | 64.            | 54.            | 59.2           | .4372              | 1.1             | 151.     |              |          | 790.              |                | .04      |          |
| 11               |              |                              |                  |                       |                      |                               | 73.            | 54.            | 62.0           | .4672              | 2.0             | 311.     |              |          | 749.              |                | 0.00     |          |
| 12               |              |                              |                  |                       |                      |                               | 72.            | 57.            | 65.6           | .5312              | 1.5             | 213.     |              |          | 811.              |                | .09      |          |
| 13               |              |                              |                  |                       |                      |                               | 76.            | 59.            | 69.1           | .5752              | 2.9             | 362.     |              |          | 763.              |                | 0.00     |          |
| 14               |              |                              |                  |                       |                      |                               | 58.            | 39.            | 50.4           | .2930              | 3.3             | 297.     |              |          | 683.              |                | 0.00     |          |
| 15               |              |                              |                  |                       |                      |                               | 59.            | 37.            | 49.8           | .2762              | 2.3             | 416.     |              |          | 609.              |                | 0.00     |          |
| 16               |              |                              |                  |                       |                      |                               | 54.            | 37.            | 46.7           | .2536              | 2.8             | 307.     |              |          | 654.              |                | 0.00     |          |
| 17               |              |                              |                  |                       |                      |                               | 63.            | 36.            | 51.0           | .2838              | 2.7             | 391.     |              |          | 627.              |                | .24      |          |
| 18               |              |                              |                  |                       |                      |                               | 52.            | 35.            | 42.5           | .2208              | 2.6             | 444.     |              |          | 542.              |                | .03      |          |
| 19               |              |                              |                  |                       |                      |                               | 60.            | 35.            | 51.1           | .3478              | 2.6             | 225.     |              |          | 714.              |                | 0.00     |          |
| 20               |              |                              |                  |                       |                      |                               | 66.            | 56.            | 58.7           | .4630              | 2.2             | 96.      |              |          | 795.              |                | .35      |          |
| 21               |              |                              |                  |                       |                      |                               | 58.            | 45.            | 51.7           | .3527              | 1.9             | 136.     |              |          | 745.              |                | .50      |          |
| 22               |              |                              |                  |                       |                      |                               | 52.            | 38.            | 45.3           | .2463              | 3.3             | 341.     |              |          | 618.              |                | .05      |          |
| 23               |              |                              |                  |                       |                      |                               | 41.            | 31.            | 36.7           | .1714              | 3.0             | 213.     |              |          | 634.              |                | 0.00     |          |
| 24               |              |                              |                  |                       |                      |                               | 47.            | 28.            | 36.7           | .1436              | 2.0             | 409.     |              |          | 518.              |                | 0.00     |          |
| 25               |              |                              |                  |                       |                      |                               | 46.            | 34.            | 40.3           | .2194              | 3.1             | 133.     |              |          | 679.              |                | .11      |          |
| 26               |              |                              |                  |                       |                      |                               | 51.            | 43.            | 46.0           | .2775              | 1.4             | 168.     |              |          | 700.              |                | .05      |          |
| 27               |              |                              |                  |                       |                      |                               | 67.            | 45.            | 53.9           | .3538              | 1.0             | 317.     |              |          | 671.              |                | 0.00     |          |
| 28               |              |                              |                  |                       |                      |                               | 60.            | 52.            | 56.3           | .4306              | 3.0             | 64.      |              |          | 784.              |                | .07      |          |
| 29               |              |                              |                  |                       |                      |                               | 63.            | 51.            | 60.3           | .4983              | 2.9             | 51.      |              |          | 811.              |                | 1.68     |          |
| 30               |              |                              |                  |                       |                      |                               | 50.            | 31.            | 41.3           | .1852              | 4.3             | 298.     |              |          | 605.              |                | .12      |          |
| MONTHLY AVERAGE= |              |                              |                  |                       |                      |                               |                |                |                |                    |                 |          |              |          | 687.              | TOTAL=         | 4.47     |          |

THE SYMBOLS USED ARE AS FOLLOWS.

WE=WATER EQUIVALENT EA=VAPOR PRESSURE(AIR) Q1=INCOMING SOLAR RADIATION QA=ATM. LONGWAVE RADIATION PX=PRECIPITATION  
 TA=AIR TEMPERATURE PO=SNOW COVER OUTFLOW OR=REFLECTED SOLAR RADIATION TS=SNOW SURFACE TEMPERATURE U=WIND SPEED  
 M=MISSING DATA BLANKS INDICATE THAT NO OBSERVATION WAS MADE - INDICATES DISTRIBUTION UNKNOWN  
 NOTE...THE AVERAGE MONTHLY VAPOR PRESSURE IS EXPRESSED AS A DEW-POINT WITH THE SAME UNITS AS AIR TEMPERATURE.





## APPENDIX G

### HISTORY OF THE OPERATION OF THE W-3 WEIR

This appendix documents the operation of the W-3 weir from the time records were initiated in December 1959 through September 1974. The W-3 streamflow measurement site is comprised of a weir control point and a continuous water level recorder located in a stilling well. The recorder water level readings are periodically referenced against staff gages and weir notch elevation by transit. The weir is physically deiced daily and the stilling well is heated to provide stage records throughout the winter. The term "estimated data" referred to in the following table designates a specific process for estimating stage at the W-3 weir when the collected data were in obvious error due to some malfunction. In such a situation, the stage at W-3 was estimated from another weir in the Sleepers River watershed. Either the W-8 weir (drainage area 6.04 mi<sup>2</sup>) or the W-1 weir (drainage area 16.58 mi<sup>2</sup>) was used, depending on which weir most closely matched the W-3 antecedent stage pattern for the particular event. Both the W-1 and W-8 watersheds have been found to respond similarly to the W-3 watershed. Once the surrogate weir was chosen, the antecedent stage was shifted until it matched the corresponding antecedent stage observed at W-3. The missing stage data was then estimated from the observed stage at W-8 or W-1. The one exception was the estimation of stage values during ice buildup at the weir. In this case, the stage before ice buildup and after ice removal served as the two end points for a straight line interpolation of the missing stage data.

| <u>Action</u>                | <u>Cause</u>                                                            | <u>Dates</u> |
|------------------------------|-------------------------------------------------------------------------|--------------|
| Charts start (A-35 recorder) |                                                                         | 12/9/59      |
| Estimated data               | Ice buildup                                                             | 12/13/59     |
| Estimated data               | Clock stopped for 1 hr.<br>and 5 min.                                   | 1/6/60       |
| Estimated data               | Float off, chain drive off                                              | 1/20-21/60   |
| Estimated data               | Ice buildup<br>difference between<br>original line and<br>estimated one | 2/22-26/60   |
| Estimated data               | Ice buildup                                                             | 3/26/60      |
| Estimated data               | Clock stopped                                                           | 4/12-19/60   |
| Estimated data               | Clock stopped                                                           | 5/9-12/60    |
| Estimated data               | Clock stopped, chart<br>replaced wrong                                  | 11/1-4/60    |
| Estimated data               | Muskrats, data not<br>accurate                                          | 1/28-29/61   |

| <u>Action</u>  | <u>Cause</u>                                                                     | <u>Dates</u>  |
|----------------|----------------------------------------------------------------------------------|---------------|
| Estimated data | Clock stopped, ran out -<br>out for 2 hrs. and 55 min.                           | 4/10/61       |
| Estimated data | Clock stopped                                                                    | 6/12-13/61    |
| Estimated data | Clock stopped                                                                    | 6/21-23/61    |
| Estimated data | Intake plugged                                                                   | 7/11/61       |
| Estimated data | Clock stopped                                                                    | 9/19/61       |
| Estimated data | Ice buildup                                                                      | 1/12-14/62    |
| Estimated data | Ice buildup                                                                      | 1/21-22/62    |
| Estimated data | Ice buildup                                                                      | 2/1-2/62      |
| Estimated data | Ice buildup                                                                      | 2/8,12,13/62  |
| Estimated data | Clock stopped                                                                    | 6/24-26/62    |
| Estimated data | Clock stopped for 1 hr.                                                          | 7/20/62       |
| Estimated data | Ice buildup                                                                      | 1/25/63       |
| Adjusted data  | Clock off for 1 hr.                                                              | 5/17/63       |
| Estimated data | Weir drained for<br>construction, cover off,<br>no charts                        | 7/1-26/63     |
| Adjusted data  | Charts on reversal                                                               | 7/26-30/63    |
| Estimated data | Clock stopped                                                                    | 5/14-15/64    |
| Estimated data | Ice buildup                                                                      | 1/15-16/65    |
| Estimated data | For some reason water<br>stopped running over notch<br>entirely when ice was cut | 1/17/65       |
| Estimated data | Ice buildup                                                                      | 2/21/65       |
| Estimated data | Weir drained                                                                     | 7/27-30/65    |
| Estimated data | Cable for weight broke                                                           | 12/27/65      |
| Estimated data | Cable not in groove on<br>pulley full of ice, clock<br>didn't run                | 12/28/65      |
| Estimated data | Ice buildup                                                                      | 1/10,13,16/66 |
| Estimated data | Ice buildup                                                                      | 1/29/66       |
| Estimated data | Ice buildup                                                                      | 2/20-22/66    |
| Estimated data | Cover off                                                                        | 8/4-6/66      |
| Estimated data | Removed instrument to paint                                                      | 8/29-30/66    |
| Estimated data | Clock stopped                                                                    | 12/19/66      |

| <u>Action</u>  | <u>Cause</u>                                                              | <u>Dates</u>       |
|----------------|---------------------------------------------------------------------------|--------------------|
| Estimated data | Worked in well, installed heat bulb, brook thawed out from weir to bridge | 1/3/67             |
| Estimated data | Ice buildup                                                               | 1/19/67            |
| Estimated data | Ice buildup                                                               | 2/7,8,12/67        |
| Estimated data | Clock didn't run                                                          | 2/13-14/67         |
| Estimated data | Ice buildup didn't run                                                    | 2/16-19/67         |
| Estimated data | Worked on clock, cable was off clock pulley                               | 2/20/67            |
| Estimated data | Drifting snow                                                             | 2/24/67            |
| Estimated data | Cover off weir                                                            | 9/19-22/67         |
| Estimated data | Cover off weir                                                            | 11/27-28/67        |
| Estimated data | Clock stopped                                                             | 11/29/67 - 12/4/67 |
| Estimated data | Ice buildup, clock stopped                                                | 1/10-15/68         |
| Estimated data | Ice buildup                                                               | 2/22/68            |
| Estimated data | Clock stopped                                                             | 3/8-14/68          |
| Estimated data | Clock stopped                                                             | 8/15/68            |
| Estimated data | Clock stopped                                                             | 8/18-20/68         |
| Estimated data | Clock stopped                                                             | 8/28/68            |
| Estimated data | Put heat lamp in well                                                     | 12/9/68            |
| Estimated data | Ice buildup                                                               | 12/11,26,27/68     |
| Estimated data | Clock stopped                                                             | 12/30/68           |
| Estimated data | Clock stopped                                                             | 2/15-17/69         |
| Estimated data | Clock stopped                                                             | 3/31/69            |
| Estimated data | Removed cover for cleaning                                                | 7/25/69 - 8/5/69   |
| Estimated data | Clock stopped, cover still off                                            | 8/5-16/69          |
| Estimated data | Clock stopped                                                             | 11/22-24/69        |
| Estimated data | Clock stopped                                                             | 12/1-5/69          |
| Estimated data | Clock stopped                                                             | 12/18/69           |
| Estimated data | Clock stopped several times                                               | 1/7-8/70           |
| Estimated data | Chart ran out                                                             | 2/1-2/70           |
| Estimated data | Clock stopped                                                             | 3/14-16/70         |
| Estimated data | Clock stopped                                                             | 3/20-23/70         |



| <u>Action</u>  | <u>Cause</u>                | <u>Dates</u>     |
|----------------|-----------------------------|------------------|
| Estimated data | Clock stopped               | 8/11-19/70       |
| Estimated data | Removed cover to clean weir | 8/14/72 - 9/2/72 |
| Estimated data | Clock stopped               | 12/14/72         |
| Estimated data | Clock stopped               | 12/24-26/72      |
| Estimated data | Clock stopped               | 12/26-28/72      |
| Estimated data | Chart ran out               | 7/9-10/72        |
| Estimated data | Removed cover to clean weir | 7/12-13/72       |
| Estimated data | Removed cover to clean weir | 7/30/74 - 8/2/74 |

## APPENDIX H

### STANDARD PUNCHED CARD FORMAT

This appendix describes the standard punched card format which is used for much of the data that is written in card image on the magnetic tape. This format can be used for all raw hydrologic data and most computed data. However, this appendix only describes those features used for the W-3 watershed data.

The data values are punched in 52 columns (29 to 80) and can be from two to nine digits in length. Field length can not vary on a given card, but can vary within a data deck. The following table shows the maximum number of data entries per card for various field lengths.

| <u>Field length</u> | <u>Max. number of entries</u> |
|---------------------|-------------------------------|
| 2                   | 26                            |
| 3                   | 17                            |
| 4                   | 13                            |

The contents of each card are as follows:

Columns 1 to 4 contain a card number, 1 to 9999. Cards are numbered consecutively in any one deck.

Column 5 contains the data field length, 2 to 4.

Column 6 contains the number of digits following the decimal point. The following examples illustrate the use of columns 5 and 6.

| <u>Col 5</u> | <u>Col 6</u> | <u>Data field</u> | <u>Quantity</u> |
|--------------|--------------|-------------------|-----------------|
| 4            | 1            | 2327              | 232.7           |
| 3            | 2            | 232               | 2.32            |
| 3            | 1            | 232               | 23.2            |
| 3            | 0            | 232               | 232.            |
| 3            | 0            | -14               | -14.            |

Columns 7 to 15 contain an alphanumeric station or basin identifier.

Columns 16 to 18 contain the data time increment in hours. For data representing a total or average value over a period, the time interval is the length of the period.

Columns 19 to 20 contain a two-digit code indicating the type of data on the card. The codes used for the W-3 watershed data are:

| <u>Code</u> | <u>Data type</u>        | <u>Units</u> |
|-------------|-------------------------|--------------|
| 10          | Precipitation amount    | inches       |
| 4           | Mean daily discharge    | CFSD         |
| 32          | Maximum air temperature | °F           |
| 34          | Minimum air temperature | °F           |
| 36          | Average air temperature | °F           |

Columns 21 to 28 contain the time of the first data entry on the card in the form: hour (21-22), day (23-24), month (25-26), and year (27-28). If the data are a period average or total, columns 21 to 28 contain the time of the end of the period.

Columns 29 to 80, as indicated previously, contain the data values.

Missing data are indicated by filling the data field with nines. For precipitation data only, a data field of all nines except for an 8 as the low order digit, indicates missing time distribution. A group of one or more such fields is followed by a valid quantity which is the accumulated amount over the period. In the case of valid data that have the same representation as missing data or missing time distribution, the low order digit is reduced to the next valid value. This rarely occurs.

Normally, all data periods will have an entry. However, for precipitation data, space can be saved by not including periods with no precipitation which would be the leading fields on any given card. That is, while all entries on a card must be in sequence and continuous, the next card will start with the next non-zero period. Input routines using precipitation data must zero the monthly storage array before reading the standard format cards.

Temperature data, which contain negative values, are punched in a constant field length of 3 to simplify the reading of these data.

There is at least one data card per month. In addition, data from two months do not appear on any single card. The data for the next month always start on a new card.









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